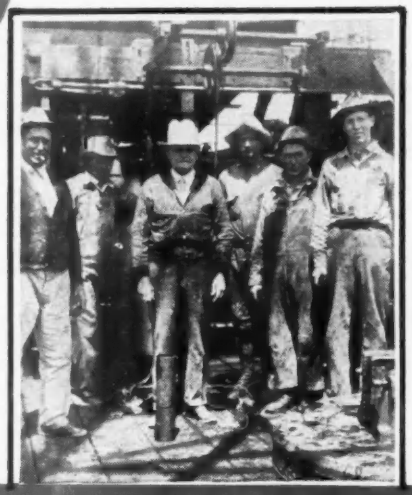
15 CENTS A COPY

THE OIL WEEKLY

OIL & GAS ENGINEERING

News Statistics

9 thousand 2 hundred AND 50 feet...



Another DEPTH RECORD *with*

HUGHES TOOL JOINTS

The men in the picture are (left to right):
Drew Collins, foreman
M. M. Petty, driller
John Richardson, superintendent
D. Ellender, floorman
Bud Carlisle, floorman
Willie Picard, derrick-man

Hughes Tools Sold by Supply Stores Everywhere

The above photograph shows the Union Sulphur Company's Fee No. 762, Sulphur Dome, Calcasieu Parish, Louisiana. The hole was abandoned in salt at a depth of 9,250 feet—"a long-ways down" even in this day of deep drilling.

Hughes Acme Thread Tool Joints (3" size) were used on this well,—another instance of Hughes Tools successfully meeting an unusual performance test.

HUGHES TOOL COMPANY

Service Plants
Los Angeles, Calif.
Oklahoma City, Okla.
Midland, Texas

Main Office and Plant
HOUSTON, TEXAS

Export Offices
Woolworth Building
New York City

June 12, 1931

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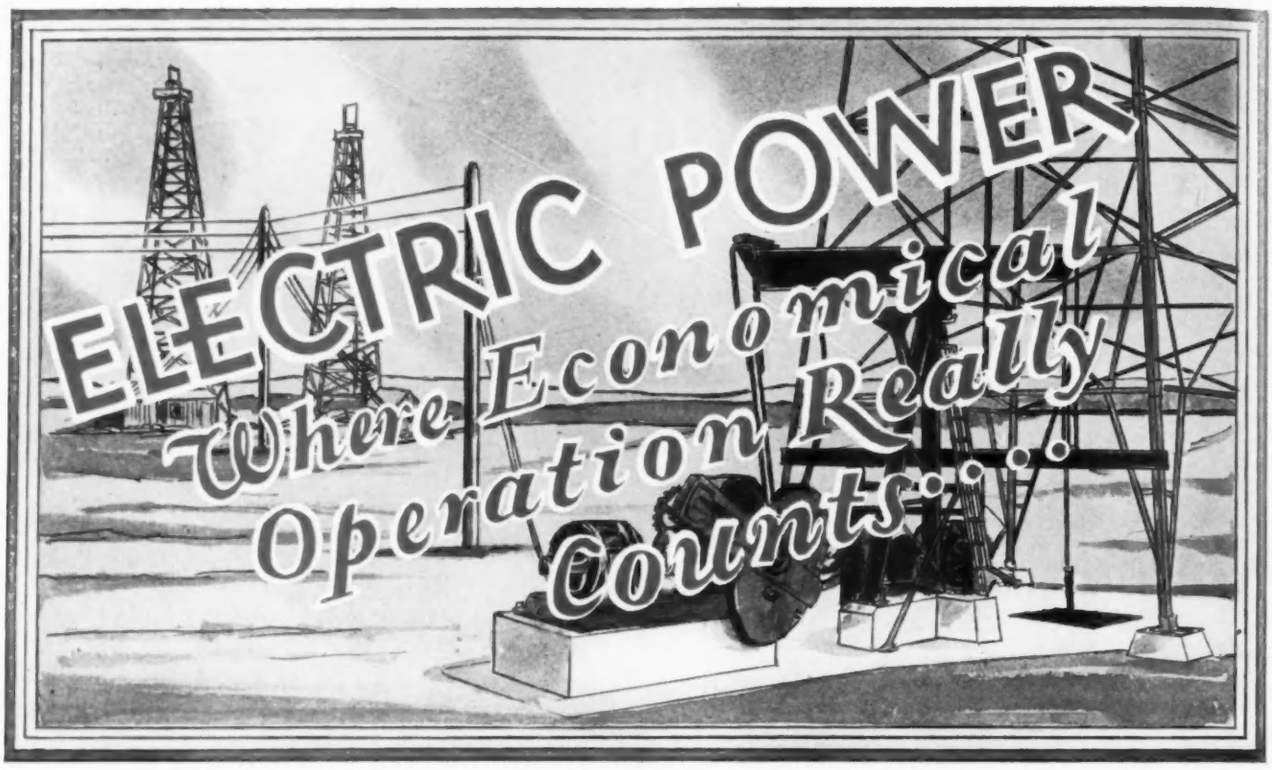


With "lower operating expenses" the watchword of the day, oil company executives everywhere are looking at their operating overhead with decidedly critical eyes.

Their conclusions are bound to be "use electric power and maintain really economical operation with radically reduced labor costs."

Specific information with regard to the advantages of electric power in the oil industry is readily available to oil company executives and engineers through the nearest district office of Texas Electric Service Company. A card or letter will quickly bring an electric power expert to your office with complete records of electric power costs and accomplishments.

TEXAS ELECTRIC SERVICE COMPANY

General Offices: **Fort Worth**

District Offices:

Fort Worth	**Wichita Falls**	**Sweetwater**	**Midland**
Eastland	**Seymour**	**Big Spring**	**Eagle Pass**

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879

Gaso Pumps are offered on the basis of VALUE —NOT PRICE

It is impossible to judge the value of pumps by price alone. You must also take into consideration the quality of design and construction that determines operating and upkeep costs . . . To those who select pumps on the basis of maximum service per dollar, we confidently offer the GASO line of truly economical oil industry pumps.

GASO PUMP & BURNER MFG. CO. - - Tulsa, Okla.

Export Office: New York, N. Y.

Shown below is GASO Timken Bearing Enclosed Power Pump, Fig. 1508. Interchangeable liners give capacities ranging from 63 bbls. per hour at 800 lbs. working pressure to 250 bbls. per hour at 250 lbs. pressure. Arranged for any type of drive desired

GASO PUMPS

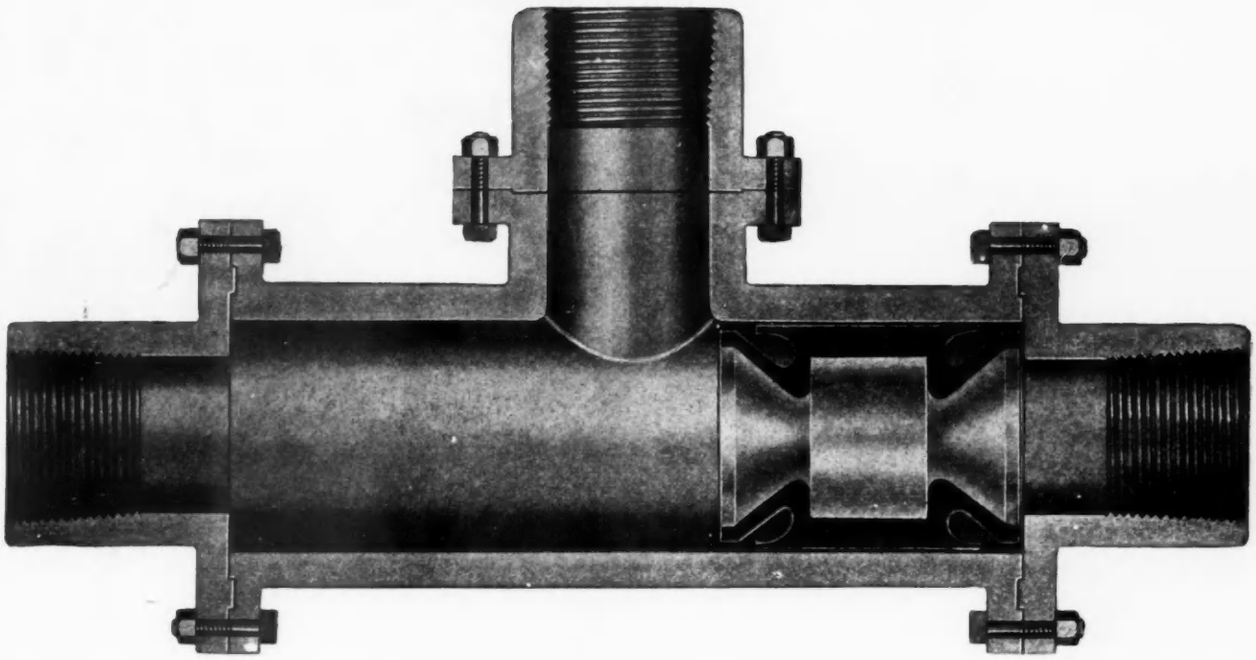
FOR EVERY OIL INDUSTRY NEED

Here is another example of how Dresser Couplings speed up difficult laying jobs. This 208-mile 18-inch gas line went from Louisiana to Memphis in 92 days—across fields, gumbo, swamps, rivers, railroads, canals, ditches and bayous. Dressers are standard for long-distance lines because they make the quickest, tightest and most flexible joints—least expensive to maintain. They remain permanently tight.

S. R. DRESSER MANUFACTURING CO.
Bradford, Pa.

DRESSER
COUPLINGS
DOMINATE

BRAUER SUPERIOR VALVES



BRAUER IMPROVED MANIFOLD VALVE

The improved features of this valve are the new double cup plunger and flat face valve seats. This eliminates the trouble with the plunger sticking and also does away with the necessity of any additional packing means.

The plunger is of molded rubber around a steel core, this permits a metal to metal seat with a rubber seal against a flat face valve seat.

The fluid pressure exerted against the plunger cup also makes a seal against the cylindrical bore of the valve and prevents sand working around the plunger causing it to stick.

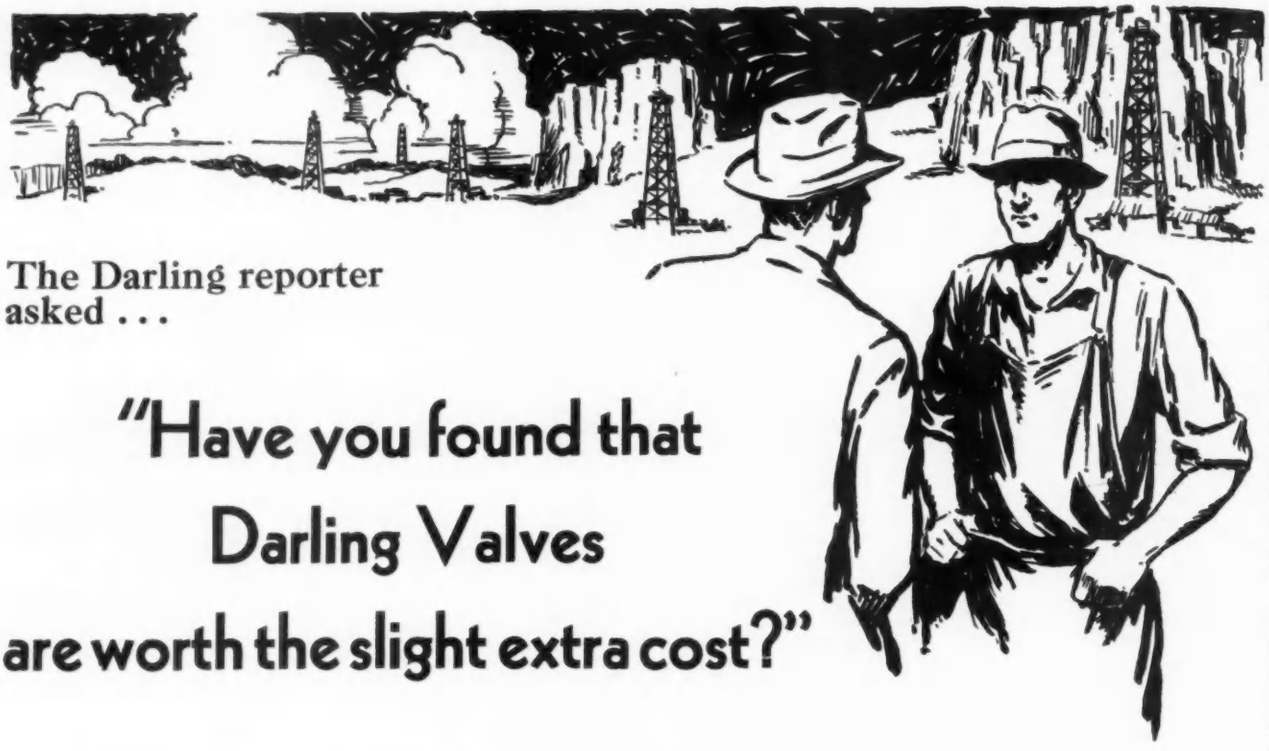
OTHER BRAUER PRODUCTS

Swivel Circulating Head
Hydraulic Wall Hook
Shale Separators
Stand Pipe Goosenecks
Compound Brake Lever
Valve Seat Pullers
Elastic Safety Lock Nuts
Special High Pressure Fittings
Flow Control Valve

Brauer Superior Products Sold Through
Your Supply Store

BRAUER MACHINE & SUPPLY CO.

OKLAHOMA CITY, OKLAHOMA ARP, TEXAS



The Darling reporter asked . . .

"Have you found that Darling Valves are worth the slight extra cost?"

"You bet! But we were a bit doubtful before we actually tried them. Naturally we want the best we can get for the least money. Though Darlings do cost a bit more, we find them more than worth the difference in the long run."

Darling Valves are constructed on sound mechanical principles, with an exclusive feature that insures long and satisfactory service—revolving gate discs that seat in a different place each time the valve is closed.

The exceptional quality of the metals used in Darling Valve construction and Dar-a-loy bronze trimmings — the exacting workmanship, inspections and tests — all contribute to the unusual performance of Darling Valves.

At your request, we'll gladly send you complete information.

DARLING GATE VALVES

Darling Valve & Mfg. Co.

Williamsport, Pa.

New York Los Angeles Oklahoma City Houston

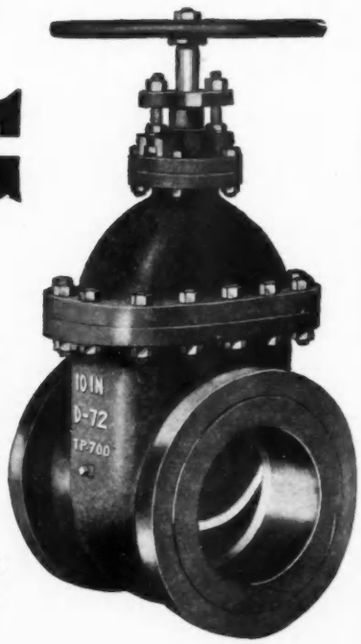
Mid-Continent Distributors

Frick-Reid Supply Corp. International Supply Co.

Foreign Sales Manager
H. M. HEIN
Room 1405, 152 West 42nd Street
New York, N. Y.

Darling Forged Steel Gate Valve, Dar-a-loy trimmed. For Drilling well control, flow lines and other hazardous conditions.

Darval Semi-Steel Gate Valve, Dar-a-loy trimmed. Made in all sizes for general field use, pipe lines, drilling through, and well flow lines.



Reserve your FREE Copy of Composite Catalog

Now!

The 1931 Edition of our Composite Catalog of Oil & Gas Production and Pipe Line Equipment, is now in process of preparation. Several important improvements and additions are being included.

This Composite Catalog, as many of you will recall from previous Editions, will contain descriptive matter on hundreds of standard pieces of oil and gas production and pipe line equipment, as well as a large array of data on recently developed specialties. It is in effect a co-operative catalog participated in by more than 200 manufacturers.

The 1931 edition will contain the newly revised American Petroleum Institute Standardization Specifications and in addition will include a special conversion table by which various foreign measurements pertaining to the oil industry may be reduced to English or American measurements, or vice versa.

This Composite Catalog is distributed free of charge, postage prepaid, to American oil men and men employed in foreign fields, who come within the following classifications:

Executives in charge of production, drilling or pipe line work.

Engineers employed on production, drilling or pipe line work.

Purchasing agents engaged in above work.

Superintendents or foremen engaged in above work.

To make sure that you get your copy, fill out the coupon at right and mail it immediately.

THE GULF PUBLISHING COMPANY,
Publishers, The Composite Catalog of Oil Field and Pipe Line Equipment,
Post Office Box 1307, Houston, Texas.

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Please send me, postpaid, a copy of the 1931 edition of the Composite Catalog of Oil Field and Pipe Line Equipment, with your compliments.

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My position is .....

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PREMIER
TESTED
Welding Wires

Superiority Proved by Service

Of equal importance to skill is the quality of Welding Wire. Good wire means perfect work, satisfied customers and lower shop costs. Premier Welding Wire is good wire—proved superior under all conditions of service—both electric and gas. Each bundle is shop tested to assure its uniform structure, free flowing and deeply penetrating qualities. Today, write us about your welding problems—no obligation.

1831

1931

AMERICAN STEEL & WIRE COMPANY

208 South La Salle Street, Chicago SUBSIDIARY OF UNITED STATES STEEL CORPORATION And All Principal Cities

Pacific Coast Distributors: Columbia Steel Company, Russ Building, San Francisco *Export Distributors:* United States Steel Products Company, New York

Job after job

with the same string of

JONES H.M.

FULLY NORMALIZED

SUCKER RODS

Case No. 2756 . . . . After being set up extra tight with a No. 3 Meeks Wrench, a full string of Jones Rods began service in the 2,900 foot well of John Rogers at Greenwich, Kansas on September 2, 1929—shown above. Ran 20 days without counterbalance at 32 revolutions or a *daily* total of 92,160 up and down strokes . . . then a counterbalance was added and the well slowed down. It then ran for 60 days at a minimum of 26 r.p.m. with but one break, or a remarkable total of 4,492,800 up and down strokes.

Same string of rods was then sold to the T. M. Deal Company and used on a very tough well for 15 days more before the first break, and some time later when pumping operations were abandoned on this well, this same string was used again on a third well with excellent results.

THE S. M. JONES COMPANY

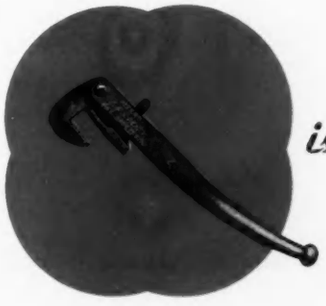
TOLEDO, OHIO

Mid-Continent Office—McBirney Bldg., Tulsa, Okla.

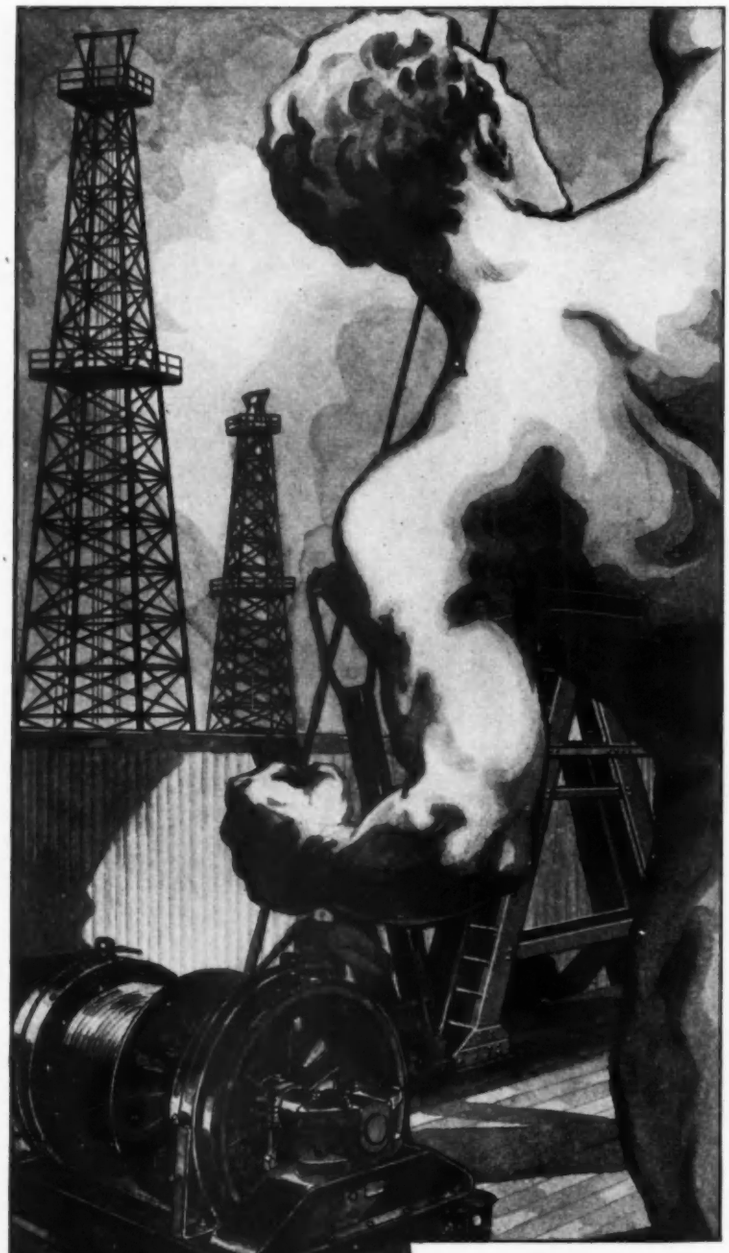
Export Distributors

The Parkersburg Rig & Reel Co., 25 Broadway—Room 736
NEW YORK, N. Y.

» » *and "the" sucker rod wrench*



is **MEEKS!**



A GIANT *in Size* A WHIZ *for Speed*

A GIANT'S size . . . a giant's stability —in speed, performance and endurance — this new Parkersburg Type B Chain-Driven Sand Reel looms above any the oil world has previously known. This modern giant—good for 10,000-foot operations — has those invaluable qualities which reduce drilling costs.

It meets your needs not only for the deep drilling and high speeds of today, but for the deeper drilling and higher speeds of the future. . . .

This latest Sand Reel, like all Parkersburg Products, is engineered to a new standard of performance and endurance. Advancements such as double brakes for double safety, tapered alloy steel flanges for extra strength, finer balance and spooling, are convincing features.

Ask the nearest Parkersburg Man or write for descriptive data on this "Sand Reel of Tomorrow."

Parkersburg No. 70A Sand Reel for 7,000-foot operations, which combines the same features of construction and performance, is also available.

THE PARKERSBURG RIG AND REEL CO.

TRADE MARK REG.

This Seal of Quality and Service on Parkersburg Equipment Is Your Guarantee.

QUALITY AND SERVICE

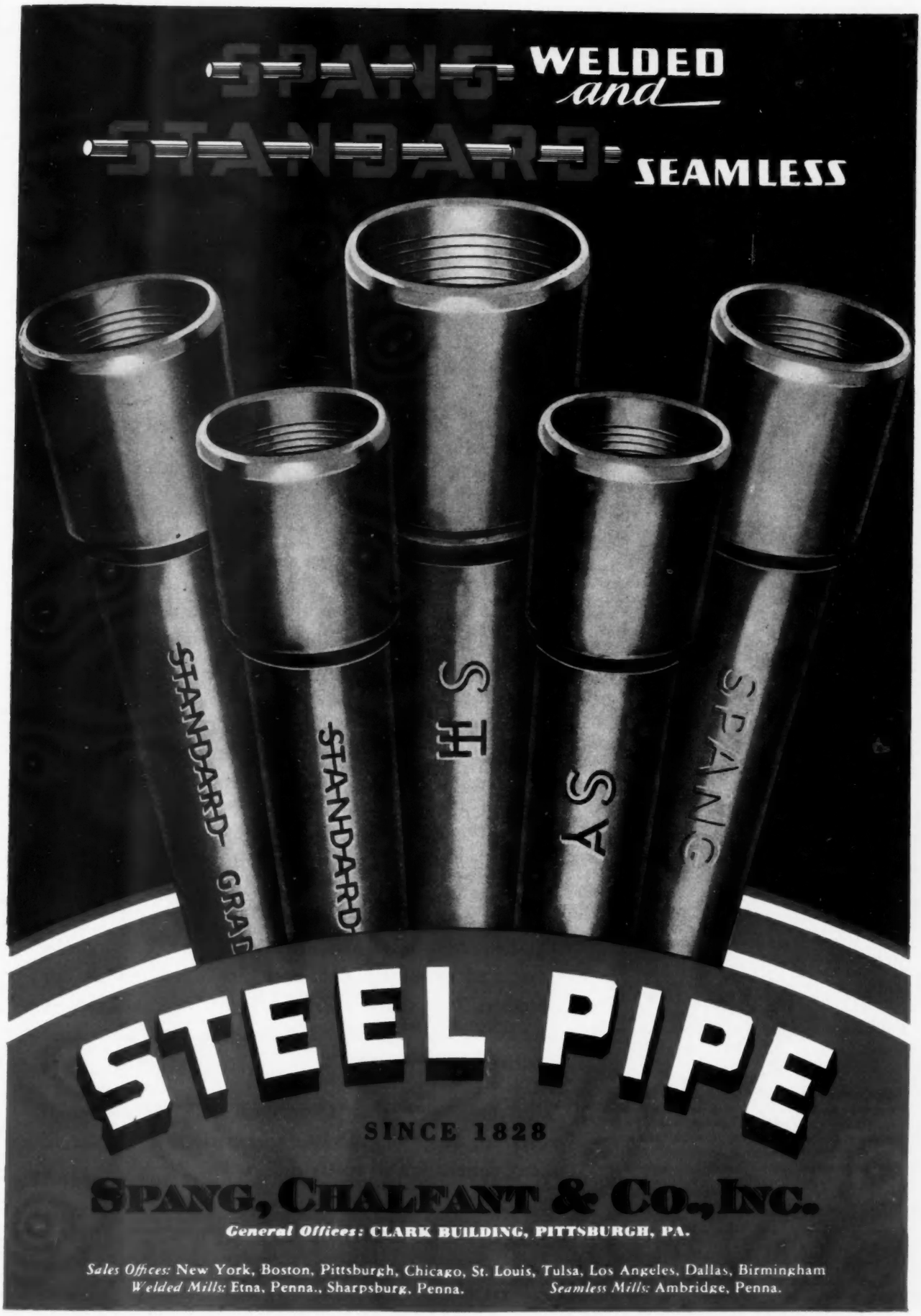
From DERRICKS THE PARKERSBURG RIG AND REEL CO. To TANKS

PARKERSBURG, W. VA.

NEW YORK • TULSA • FT. WORTH • HOUSTON

BRANCHES IN ACTIVE FIELDS

CABLE ADDRESS "PARIGREEL"


SPANG
STANDARD
WELDED
and
SEAMLESS
STANDARD
STANDARD
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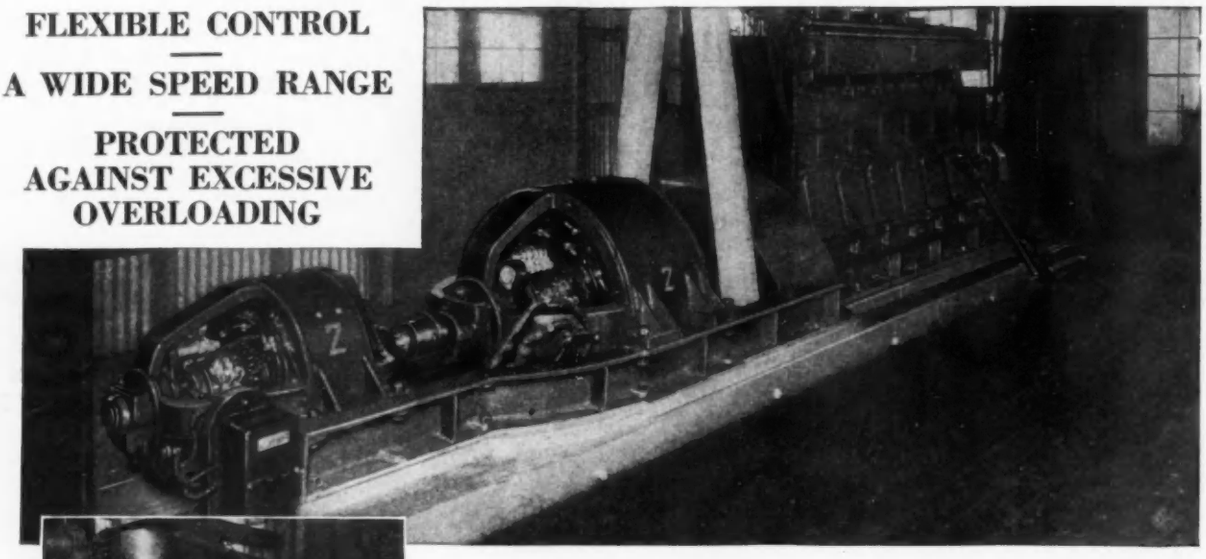
SPANG
STEEL PIPE
SINCE 1828
SPANG, CHALFANT & CO., INC.
General Offices: CLARK BUILDING, PITTSBURGH, PA.
Sales Offices: New York, Boston, Pittsburgh, Chicago, St. Louis, Tulsa, Los Angeles, Dallas, Birmingham
Welded Mills: Etna, Penna., Sharpsburg, Penna.
Seamless Mills: Ambridge, Penna.

General Electric Introduces a New D-c. Drive for Drilling

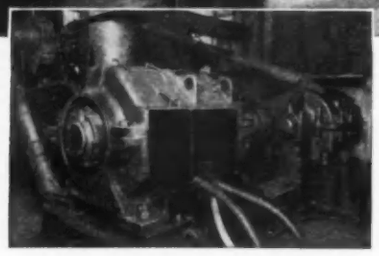
FLEXIBLE CONTROL

A WIDE SPEED RANGE

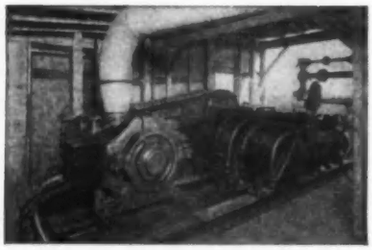
PROTECTED AGAINST EXCESSIVE OVERLOADING



One of the generating sets. This compact set includes a 125-kw., 250-volt, d-c. generator and exciter, driven by a 200-hp. Diesel engine



Draw-works drive



Mud-pump drive. The same type of G-E 150-horsepower, enclosed, d-c. motor, operated by Ward-Leonard control, is used for draw-works and mud-pump drives

General Electric also furnishes a-c. drilling equipment with heavy-duty magnetic control. This equipment has found universal favor because of its adaptability to various drilling conditions, and its automatically controlled, rapid acceleration. G. E. furnishes complete equipment to the oil industry, including motors, control, transformers, arresters, and switchgear.

IT HAS already made a hit. Users of this new G-E drive for rotary drilling have found that they've at last obtained the unbeatable flexibility of direct current together with the wide speed range heretofore thought possible only with steam drive. The engines cannot be stalled by an overload, nor can the electric equipment be overtaxed.

Where there are no power lines, this outfit, with Diesel- or gasoline-driven generating equipment, combines the advantages and economies of electric drive and internal-combustion engines: smoothness, low maintenance, ease of handling. And water consumption is reduced to a negligible amount. Where power can be taken from transmission lines, the same advantages may be realized by using a motor instead of an engine to drive the generator.

With these and other advantages available, field engineers are beginning to consider seriously the use of direct current for all rotary drilling.

O-1-31H

GENERAL ELECTRIC

SALES AND ENGINEERING SERVICE IN PRINCIPAL CITIES

Youngstown Seamless Drill Pipe is available in 95,000 pounds API Grade D, and 110,000 pounds API Grade E, minimum tensile strength.

In DRILLING

Rotary drilling—with Youngstown seamless in California Territory. Thousands of such wells have demonstrated that there is no superior to Youngstown drill pipe, tubing and casing.

In DISTRIBUTION

Laying a line of Youngstown 20" electric-weld pipe in Virginia.

OUT in the fields where wells are drilled or—stretching across the country to the centers of consumption, Youngstown steel pipe is serving the oil and gas industries in wells and pipe lines.

■ Whatever the service, whatever the conditions, the strength and endurance of this fine steel pipe is evidenced by its long life, its ability to stand abuse and its resistance to the corrosive actions of soil, atmosphere and moisture.

■ Thousands of miles of Youngstown pipe—in wells and pipe lines—have proved to oil and gas men the country over that Youngstown is a safe investment for every pipe need.

THE YOUNGSTOWN SHEET & TUBE CO.

One of the oldest manufacturers of copper-steel, under the well-known and established trade name "Copperoid"

General Offices: **YOUNGSTOWN, OHIO**

Distributors:

CONTINENTAL SUPPLY CO. *1501 Locust Street, St. Louis, Mo.*

INTERNATIONAL SUPPLY CO. *Tulsa, Okla.*

REPUBLIC SUPPLY CO., *2122 East 7th Street, Los Angeles, Cal.*

YOUNGSTOWN

FROM ORE MINE TO GAS LINE

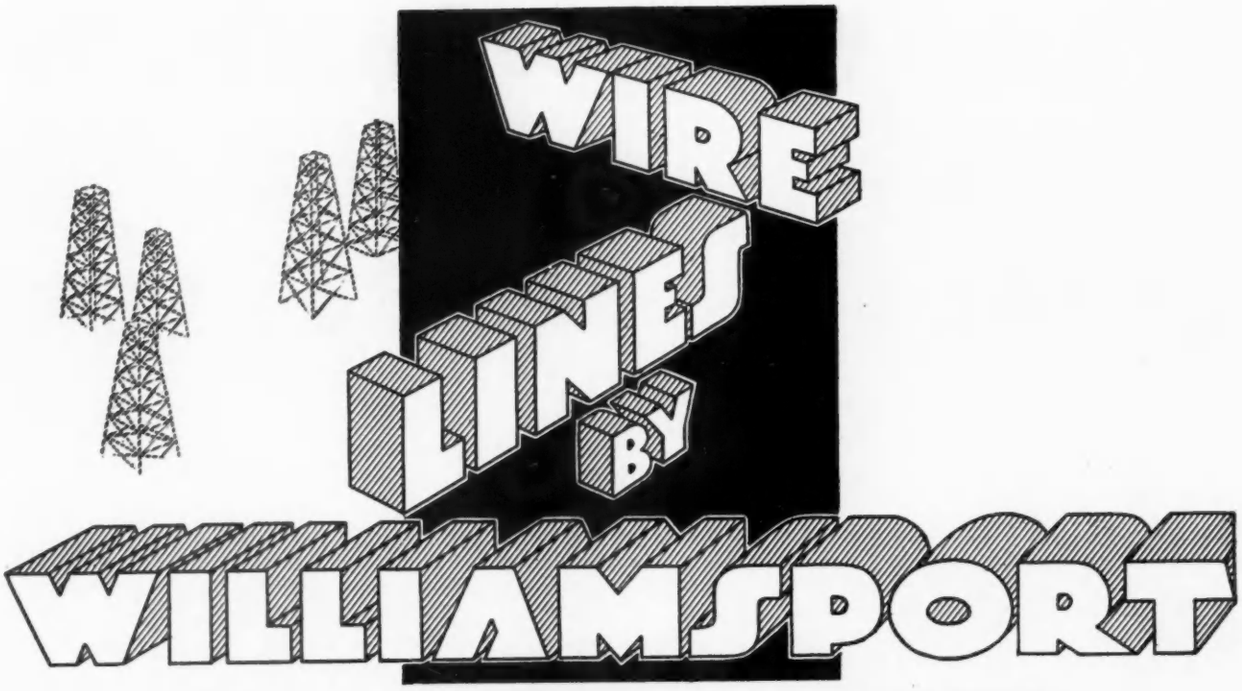
APPLYING EXPERIENCE TO "HOT SPOTS"

There is no substitute for experience. It dictates the particular kind of pipe for a particular corrosive condition, and the combination of different kinds of material into balanced pipe lines is "pipe prescription." Where the problem is corrosion (the principal cause of "hot spots")

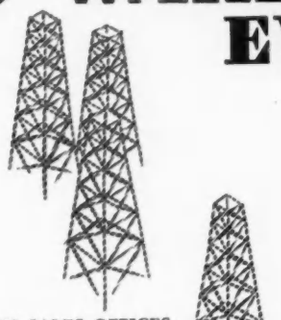
BYERS • GENUINE • WROUGHT-IRON PIPE

experience dictates the use of Byers Genuine Wrought-Iron Pipe. Its performance record in this service has established it as a true economy. Our 67 years' experience in applying wrought-iron in the economical solution of corrosion is at your disposal. A. M. Byers Company, Pittsburgh, Pa. Established 1864.

AN INVESTMENT - NOT AN OUTLAY



With WAREHOUSE STOCKS *in* EVERY FIELD



Good wire lines cost less in the long run!

Williamsport Lines are preferred by drillers because they are all uniform in quality.

Our process of manufacture; of testing and checking minute details during the making—Our control of the quality of steel from rods to the finished product is what makes the difference between good lines and fairly good lines—We draw all of our own wire.

There are many reasons why you should prefer Williamsport Lines. These are some.

OIL COUNTRY SALES OFFICES:
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and all of their Mid-Continent Branches

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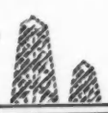
Maud, Okla.
Oklahoma City, Okla.
Odessa, Texas
Pampa, Texas
Seminole, Okla.
Shidler, Okla.

Shreveport, La.
San Antonio, Texas
Tulsa, Okla.
Wichita Falls, Texas
Wink, Texas

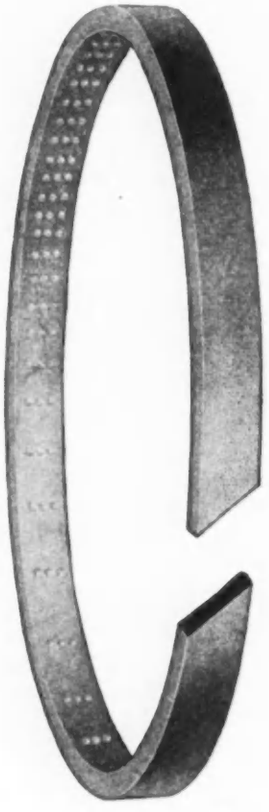


WILLIAMSPORT WIRE ROPE COMPANY

Main Office and Works: **Williamsport, Pa.** ***General Sales Offices:*** **122 S. Michigan Ave., Chicago, Ill.**

No Matter What Type Rings You Use

HAMMERING MAKES THEM BETTER



AMERICAN HAMMERED ANGLE JOINT RING

A one-piece, concentric, quick-seating, hammered piston ring with a 45° angle joint.

NO MATTER in what kind of engine a piston ring is used, it has two fundamental functions to perform. It must exert equal radial pressure all around to maintain compression, and it must retain this tension.

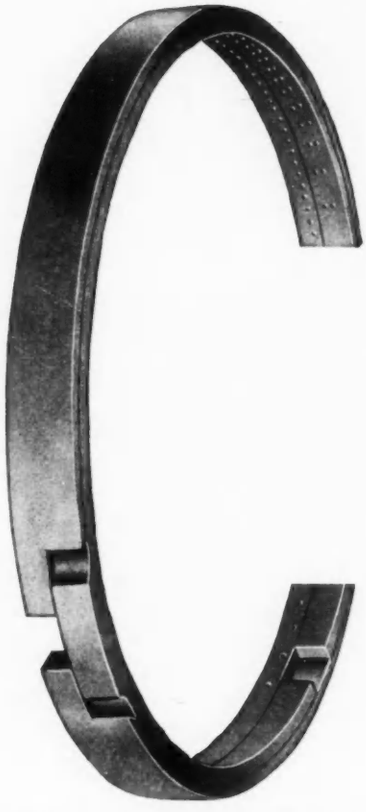
Because American Hammered Piston Rings perform these functions so perfectly, they are becoming more and more popular in all types of engines. *Hammered tension* assures equal radial pressure, for the hammering is a mechanical process, scientifically controlled.

As the hammering is on the inside of the ring, where there is no wear, the tension lasts as long as the ring itself. Wear can't affect it. Engine heat can't affect it. The tension is there to stay; it can't wear out!

In addition, all American Hammered Rings are individually cast, accurately machined, rigidly inspected and finished turned to produce a quick seat.

The American process of hammering is used exclusively in American Hammered Rings. Write today for our new hand book illustrating and describing American Hammered Piston Rings for all purposes. It is sent free.

American Hammered Piston Rings



AMERICAN HAMMERED CRONIN INNER SEAL RING

A two-piece, hammered compression ring consisting of outer and inner member, the inner ring having a lug completely sealing the joint of the outer ring. Most effective in out of round and tapered cylinders.

ENDORSED AND USED AS FACTORY EQUIPMENT BY

Ajax Iron Works - - - - Corry, Pa.	Dow Pump & Engine Co. - Oakland, Cal.	Pennsylvania Pump & Compressor Co., Easton, Pa.
Atlas Diesel Co. - - - Oakland, Cal.	Franklin Valveless Eng. Co., Franklin, Pa.	Power Mfg. Co. - - - Marion, Ohio
Bruce-Macbeth Eng. Co., Cleveland, Ohio	I. P. M. and De La Vargne Machine Co., Philadelphia, Pa.	Jos. Reid Gas Eng. Co. - - Oil City, Pa.
Bovaird & Seyfang Mfg. Co., Bradford, Pa.	Ingersoll-Rand Co. - - New York, N. Y.	Sullivan Machinery Co. - Michigan City, Ind.
Bradford Supply Co. - - Bradford, Pa.	McIntosh & Seymour Corp., Auburn, N. Y.	Titusville Iron Works - - Titusville, Pa.
Cooper Bessemer Corp., Mount Vernon, Ohio	Muncie Oil Engine Co. - - Muncie, Ind.	Wilson Snyder Mfg. Co. - Pittsburgh, Pa.
Chicago Pneumatic Tool Co., New York, N. Y.	National Supply Co. - - Toledo, Ohio	Worthington Pump & Mach. Corp., New York, N. Y.

Can Be Obtained in Standard and Oversizes from the Above Companies or Their Selling Agents

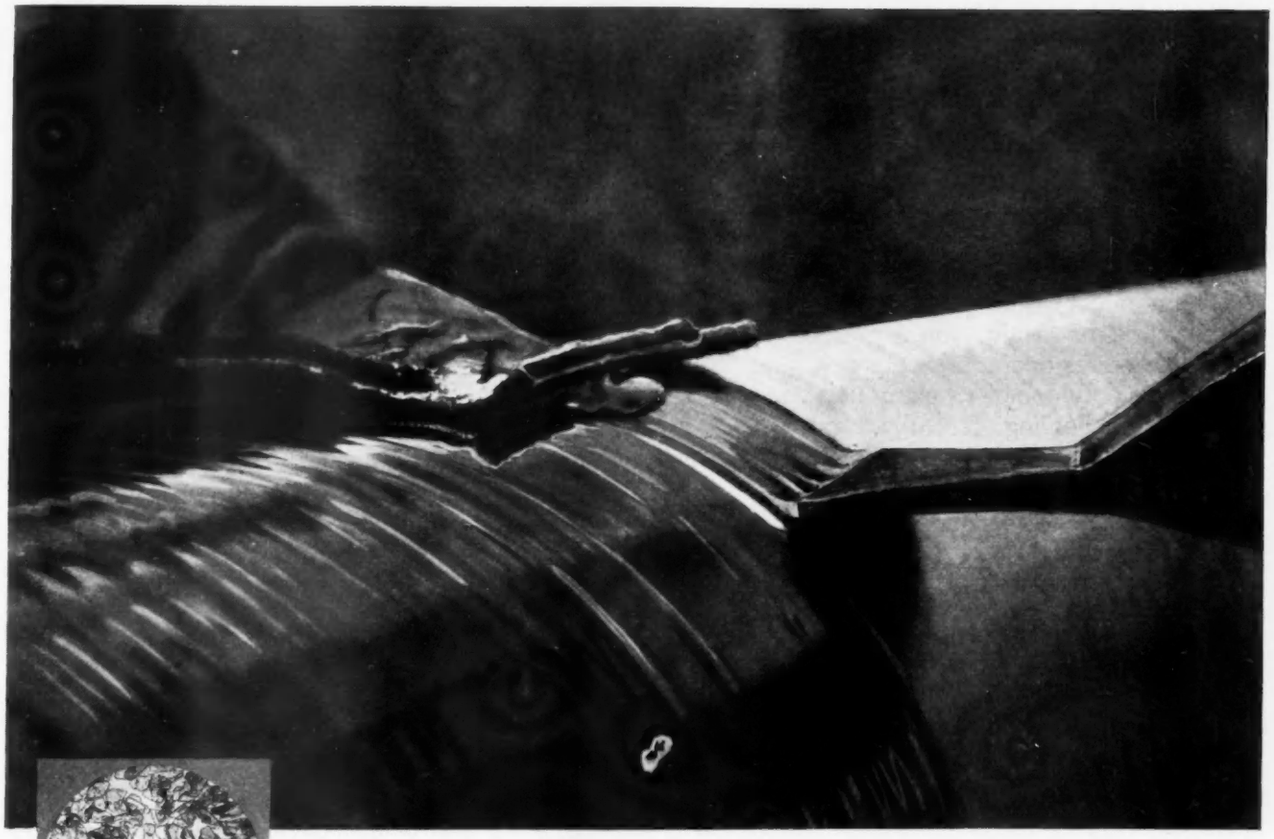
THE AMERICAN HAMMERED PISTON RING COMPANY · · · BALTIMORE, MARYLAND, U. S. A.

215 Market St., San Francisco, Calif.
501 Pico St., Long Beach, Calif.
7338 Woodward Ave., Detroit, Mich.
800 W. Rio Grande Ave., Fort Worth, Tex.
11 Moore St., New York, N. Y.
148 Pearl St., Boston, Mass.
826 E. First St., Tulsa, Oklahoma
525 Poydras St., New Orleans, La.

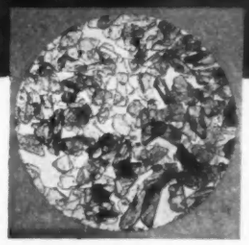
HAMMERED TENSION CAN'T WEAR OUT

Exclusive flake-type internal reinforcement insures great strength . . . long service . .

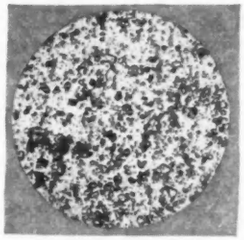
Barrett Specification PIPE LINE ENAMELS



This close-up picture illustrates revolving pipe method of applying Barrett Specification Pipe Line Enamel



Photomicrograph shows how flakes of internal reinforcement used by Barrett tend to interlock. They laminate with waterproofing agent and give Barrett Pipe Line Enamel unusual tensile strength and toughness.



And here is a photomicrograph showing how ordinary filler, the granular or dust-type looks. It is composed of smoothly surfaced particles in loose contact.

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JUN 15 1931

THE OIL WEEKLY

JUNE 12, 1931
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Editor

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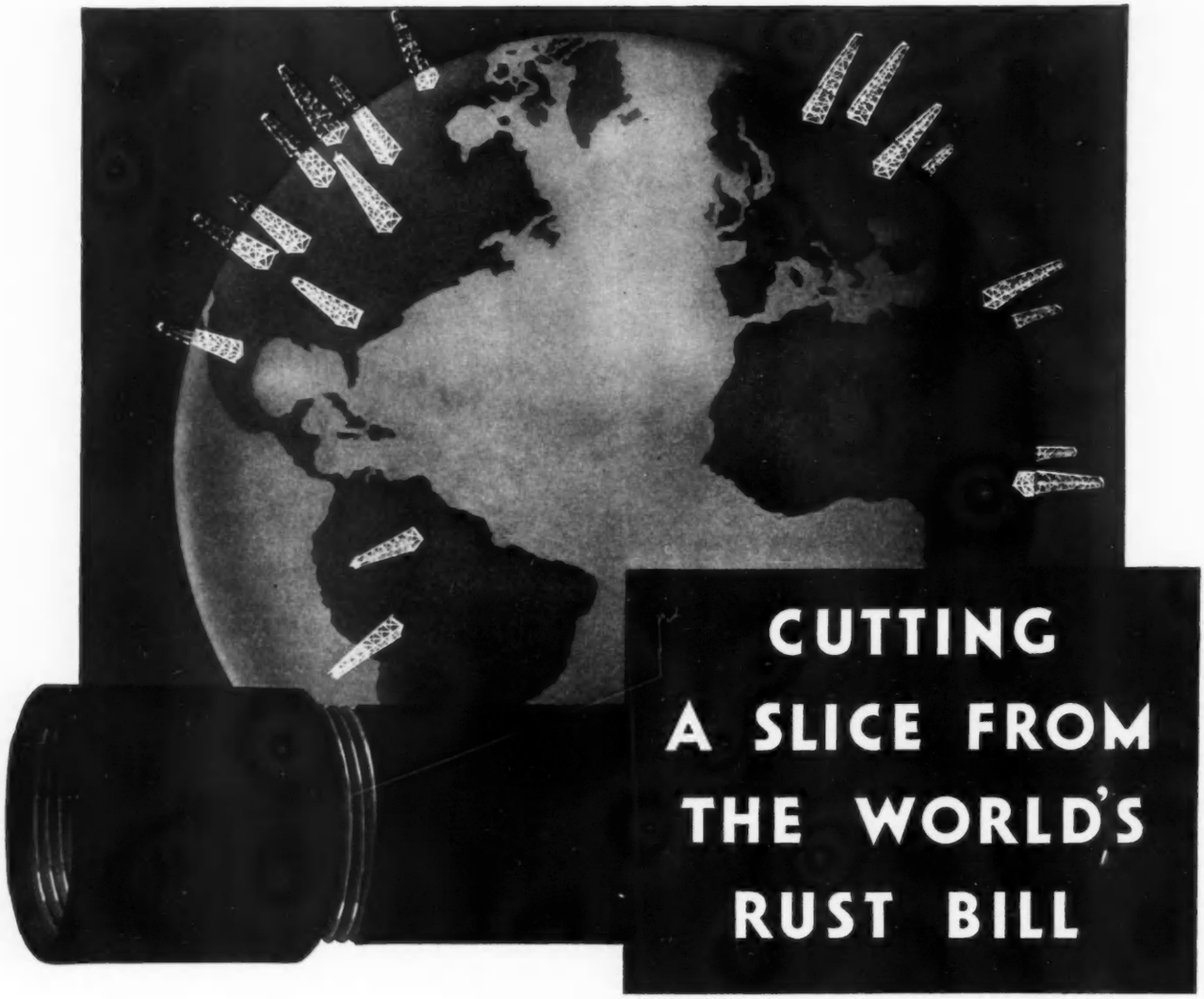

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THE OIL WEEKLY

VOLUME 61, NO. 13 JUNE 12, 1931

Officials Condemn Violators Of Proration Rules

FORT WORTH, Texas.—Violators of production rules in prorated fields were condemned in a set of resolutions drafted by the board of directors of the American Petroleum Institute during the session held here June 5. The board also adopted resolutions re-affirming the approval given at the last annual meeting of unitization of wildcat blocks and productive acreage as a means of curbing competitive drilling during overproduction periods. Endorsement of the Institute's work on standardization was supplemented by a plea for oil company executives to instruct their purchasing departments to specify materials carrying the American Petroleum Institute's standardization stamp of approval when placing orders. E. B. Reeser, president of the organization, presided at the morning and afternoon business sessions.

The economic situation now confronting all branches of the petroleum industry figured prominently in the discussions that took place during the business sessions. The board expressed appreciation of the curtailment efforts of producers, and offered its regrets that Texas has failed to remain in line with all other important oil producing states in restricting production on a basis of market demand.

Omitting any reference to East Texas, which is having a destructive influence in crude and refined oil markets of the United States, the directors placed their approval on a resolution that "condemns the policy of producing, transporting or purchasing crude from any property in amounts greater than the current daily allowable production for that property as fixed by the orders of the conservation authorities, so long as they are not attempting to limit production below the legitimate market demand." This resolution also made a plea for purchasing companies to refrain from making crude oil purchases under contracts that may conflict with the present or future orders of the state conservation authorities for ratable takings, else the present distressful situation will become perpetuated. Long period contracts made by East Texas producers to sell crude to major and independent companies is hindering proration enforcement. This resolution dealing with proration was drafted and signed by the following committee: J. Edgar Pew, Sun Oil Company, chairman; Harry F. Sinclair, Sinclair Consolidated Oil Corporation; E. R. Brown, Magnolia Petroleum Company; W. S. Farish, Humble Oil & Refining Company; and W. T. Holliday, Standard Oil Company of Ohio.

Unitization of properties is to be practiced whenever feasible, according to pledges made by the directorate, although such a plan of development has been mostly accepted in the past is being good in principle, but slow in adoption. Unitization is a permanent remedy for overproduction of the oil industry, and no new producing territory should be opened for development until all surrounding area is unitized, according to a resolution approved by the directors.

More than 50 per cent of the membership of the board of directors attended the mid-year meeting, which was preceded by a two-day session at Dallas of the Division of Production of the Institute. The Fort Worth business sessions of the board of directors were also attended by W. R. Boyd, Jr., executive vice-president, and Lacey Walker secretary and assistant treasurer, both of the New York office of the Institute; and Carl Young, who has charge of the division of standardization, with headquarters at Dallas.

Directors and several hundred prominent oil men from various points in the Mid-Continent district were guests of Amon G. Carter, publisher of the Fort Worth Star-Telegram, at Shady Oak Farm, near Fort Worth, at the conclusion of the mid-year meeting. Informal talks were made by some of the oil leaders present, with conflicting views being expressed as to the merits of proration of flush fields.

American Petroleum Institute directors attending the mid-year meeting at Fort Worth follow:

Amos L. Beaty, Phillips Petroleum Company, New York.

R. A. Broomfield, Barnsdall Oil Co. of California, Los Angeles.

E. R. Brown, Magnolia Petroleum Company, Dallas.

E. J. Bullock, Standard Oil Company of Indiana, Chicago.

John M. Crawford, Parkersburg Rig & Reel Company, Parkersburg, W. Va.

W. N. Davis, Phillips Petroleum Company, Bartlesville.

O. D. Donnell, The Ohio Oil Company, Findlay, Ohio.

L. J. Drake, Union Tank Car Company, Chicago.

W. S. Farish, Humble Oil & Refining Company, Houston.

W. S. Fitzpatrick, Prairie Oil & Gas Company, Independence, Kansas.

(*See next page*)

Wirt Franklin, Wirt Franklin Petroleum Corporation, Oklahoma City.

S. A. Guiberson, Jr., Guiberson Investment Company, Los Angeles.

W. T. Holliday, Standard Oil Company of Ohio, Cleveland.

Roy B. Jones, Panhandle Refining Company, Wichita Falls.

C. H. Kountz, Prairie Pipe Line Company, Independence, Kansas.

J. F. Lucey, Lucey Petroleum Company, Dallas.

L. L. Marcell, White Eagle Oil Corporation, Kansas City.

E. W. Marland, Ponca City, Oklahoma.

Edgar J. Marston, Texas Pacific Coal & Oil Company, Fort Worth.

P. M. Miskell, Empire Oil & Refining Company, Tulsa.

Edward T. Moore, Simms Oil Company, Dallas.

D. J. Moran, Continental Oil Company, Ponca City.

R. R. Penn, Penn Oil Company, Dallas.

J. Edgar Pew, Sun Oil Company, Philadelphia.

J. Howard Pew, Sun Oil Company, Philadelphia.

Frank Phillips, Phillips Petroleum Company, Bartlesville.

E. B. Reeser, Barnsdall Corporation, Tulsa.

H. F. Sinclair, Sinclair Consolidated Oil Corporation, New York.

Robert W. Stewart, Chicago.

East Texas Operators Plan For Handling Water Problem

Dallas, Texas.—Confronted with salt water disposal problem of a magnitude never before equalled, a number of East Texas operators met here June 3 and perfected a tentative organization that will eventually have the responsibility of handling approximately 2,500,000 barrels of salt water daily from the East Texas district. Such an estimate on probable salt water yield per day in one or two years hence went unchallenged, as 5000 producing wells is considered a low estimate, while an average of 500 barrels of water per well daily is forecast by the middle of 1932. A drainage ditch 30 feet wide and three feet deep would be required to carry off such a volume of fluid to the coast.

Don R. Gladney, right-of-way department head for Magnolia Pipe Line Company, Dallas, was elected chairman of the salt water disposal committee. Other members of this committee includes: Jas. R. Ghan, vice-president and division manager, Tidal Oil Company, Fort Worth; M. B. Sweeney, general agent-manger production for Sun Oil Company, Dallas; T. H. Rothwell, vice-president and superintendent production for Yount-Lee Oil Company, Beaumont; and M. E. Brock, Gulf Production Company, Houston.

George Martin, who has been actively in charge of cooperative salt water disposal units since the flush period of the Corsicana-Powell field, and more recently engaged at Salt Flat and Darst Creek fields, has been engaged to proceed at once in building up an organization that will function in the East Texas district. Two experienced men will be engaged as assistants to Martin and to serve as inspectors in locating the current sources of stream pollution, which has already resulted in complaints being made to a number of East Texas operators and companies by the fish and game department. Waste oil is the principal cause of stream pollution, as the quantity of salt water being produced from wells on the west side of the Kilgore and Joiner fields has not reached large proportions.

O. E. Young, production engineer for Humble Oil & Refining Company, Tyler, has been making an independent survey of the salt water and waste oil situation in the East Texas district in recent weeks, and made a report at the meeting as to conditions prevailing. Company executives agreed to furnish engineers from their respective organizations to work with Young in continuing this survey and study of the situation, and the group of engineers will later make recommendations as to course to follow in creating a disposal plant, or group of units in various sections of the field.

East Texas operators are at sea as to a satisfactory method of handling the inevitable flood of salt water, and are prepared to collectively spend large sums of money to avoid contamination of nearby streams that serve hundreds of towns and communities between the oil field and the Gulf Coast with the only source of water for human and industrial consumption.

The salt water situation is an evil that goes hand in hand with oil production in the Woodbine sand horizon, and usually results in numerous damage claims being paid by operators because of alleged contamination of fresh water supplies, or ruination of exposed land for future agricultural purposes.

Construction of a direct canal to the coast to carry off the brackish waters appears out of the question, because of the necessity to take a meandering route to accomplish a gravity flow. Purchase of right-of-way for the use of an existing river for handling of the waste fluid also has been eliminated, as thousands of acres of rice lands are irrigated from East Texas streams, besides the use of the water for human and industrial consumption along the route. Creation of a group of huge reservoirs apparently will follow, but even then the polluted water will find its way underground, due to the nature of the subsurface formation, and result in damage suits from land owners for many miles removed from the concentration points.

Creation of a co-operative salt water disposal company will materially reduce damage claims, and the company will be financed by assessing each well owner a monthly fee. Handling of waste fluid individually in the East Texas field is out of the question.

Production Division Considers Mechanical, Economic Problems

Dallas, Texas.—Problems of the producing branch of the oil industry, both economic and mechanical, were accorded full consideration at the two-day meeting of the Division of Production of the American Petroleum Institute held here June 3 and 4. Previous to the general gathering Wednesday and Thursday, committees representing the numerous activities of the division were in sessions Monday and Tuesday.

In the committee meetings which were largely concerned with the standardization of oil field equipment, many additional data were added to the standards that have already been developed and a tentative schedule of standards were

approved for bolted tanks. All approved and tentative standards of the Institute are now being revised to include later material and will be issued in complete form during the summer.

The technical sessions presided over by the drilling and production practices committees of the Division of Production included the presentation and discussion of subjects ranging from the metallurgy and performance of field equipment down through the theoretical problems of determining allowable production from prorated areas.

Under the latter subject a system of gaging allowable production in prorated fields by basing it upon the pressure drop in producing sands, rather than by employing open flow tests, was suggested by H. D. Wilde, Jr., and T. V. Moore of Humble Oil & Refining Company who held their method would overcome many of the difficulties attending present proration methods and enforcement by assuring rapid and accurate determination of allowances equitable to all operators without causing physical damage to the oil pool or imposing penalties upon efficient and economical operation. This suggestion was followed by considerable discussion which indicates that such a plan may be developed should a solution be found to certain obstacles which at present offer themselves. Further investigations are to be conducted by Mr. Wilde and Mr. Moore who will probably present additional data at a subsequent meeting of the Production Division.

Increased production rates and drastically reduced operating costs have been achieved through high volumetric efficiency in oil well pumping, Hallam N. Marsh, General Petroleum Corporation, Los Angeles, pointed out in a paper on "High Volumetric Efficiency in Oil Well Pumping".

In a technical paper "Efficient Operation of Pumping Rigs" W. C. Shutts and M. Bowman Thomas, both with Humble Oil & Refining Company, declared that the setting of well pumping rigs has much to do with the operating efficiency and a properly set rig will have less sucker-rod trouble, less wear and tear on surface equipment, minimum power consumption and maximum fluid production.

Other technical papers presented at the meeting include: "Soil Corrosivity Surveys," a review of investigations made by K. H. Logan of the U. S. Bureau of Standards; "Internal Combustion Engines for Rotary Drilling,'" by David L. Trax, Gypsy Oil Company and R. R. Hawkins, The Texas Company; "California Rotary Drilling Mud—Its Development, Reclamation and Disposal," by E. P. Tallant, Union Oil Company of California; "Drilling Fluid Problems and Treatment in the Gulf Coast", by W. T. Doherty, Humble Oil & Refining Company, Dr. Stanley Gill, Gulf Oil Companies, and C. P. Parsons, Halliburton Oil Well Cementing Company; "Oil Field Boiler Tests", by Hu. M. Harris and J. E. Eckel, Humble Oil & Refining Company; "Power Transmission Efficiency of Pumping Wells", by C. L. Shirley, Shell Petroleum Corporation; and "Behavior of Mud Pumps", by Harry E. Hayes, General Petroleum Corporation.

Independence, Kansas. — Crude oil deliveries of the Prairie Pipe Line Company for May, 1931, were 2,400,590 barrels, a daily average of 77,438.

Proposes Giant Corporation For Handling East Texas

Dallas, Texas.—Speaking before the general sessions of the Division of Production of the American Petroleum Institute here June 4, R. R. Penn, chairman of the division, vice president of the Institute and an independent operator in Texas, presented a plan for the unitization of East Texas that would involve the formation of a giant corporation.

Mr. Penn said that in his opinion it would be impossible to handle the East Texas fields under a unit plan such as those used in the Kettleman Hills Field and the Van field of East Texas in view of the tremendous bookkeeping job that would be created by any attempt to operate the properties under an individual ownership arrangement.

It is Mr. Penn's idea that:

"The ideal system would be to form a great corporation to take over all properties in the East Texas field and issue stocks or certificates of equity to the owners thereof for their interests. Here again, however, we are faced with the objection that certain corporations cannot own stock in other corporations and there probably would be some other obstacles in the way.

"So the logical solution is a combination of the two methods; first, form a corporation which will be controlled by the independent operators in the East Texas field and into which all of those independent operators will merge their interests, taking stock for same. Then such a corporation could agree with the larger companies who own larger percentages of the field, to operate all of the properties jointly under the management of this independent corporation and with the ordinary forms of committee supervision which have been worked out in Van and Kettleman Hills. Thus the corporation of the independents might own some 50 per cent of the field and some 10 or 15 major operators might own the other 50 per cent, in varying proportions. The bookkeeping involved in taking care of some 10 or 15 joint interest accounts would not be too difficult. Thus the corporation of the independents would handle the entire operating property, delivering the oil in agreed proportions to the various purchasing companies.

"Here again we are met with the question of what would become of the individual operators while they are waiting for dividends from such a corporation. The answer is not difficult. Those producers who take stock for their equities would be protected by an agreement that the corporation would pay dividends as earned, would enter no other fields and engage in no other forms of oil activity except the development of the properties in the East Texas field. Furthermore, the stock should be listed on the New York Stock Exchange or the New York Curb and made marketable, so that any owner could dispose of his stock at will and also, so that the banks would recognize such stock as collateral.

"Again there arises the question of taking care of those properties which are in debt, and of providing funds for the operations of the corporation. The answer to this would be to have valuations made and let the new corporation immediately float a bond issue sufficient in size to repay in cash the actual development expenditures of every shareholder in the corpora-

(*Continued on page* 51)

Crude Price Down Seventy-Eight Per Cent

By H. J. STRUTH
Staff Economist

RECENT reductions in the Mid-Continent crude market have brought the price level 78 per cent below the level of last year. The combined index of Mid-Continent crude prices, wholesale gasoline prices and natural gasoline prices shows a decline under April of last year amounting to 64 per cent. The accompanying barometer chart shows effect of over-production upon the price of oil. The soaring bar of new oil production, wholly influenced by developments in East Texas, and the diminishing bar of posted price of Oklahoma crude furnish a striking example of the folly of continuing to dump excessive oil supplies upon an already glutted market.

The barometer has shown some improvement, notably in the form of a further decline in stocks of crude and products, but there are so many unfavorable factors in the picture that it offers little in the way of encouragement. Any inclination to criticize the status of imports or the loss of foreign business offers little consolation when viewed in relation to the course of events in East Texas. The threat of foreign oil imports becomes a secondary matter when viewed from a competitive angle. In fact, at present prices, East Texas oil renders foreign competition practically ineffective.

Not only has East Texas oil become a wedge in the imported crude market, but it has also completely disrupted American market channels to the extent that crude produced in other sections of the United States has already been displaced by cheap East Texas oil or has been forced to relinquish entirely its hold upon former channels of distribution. The history of the oil business reveals but few instances where one field has so completely disorganized its economic structure.

Production Below Last Year

While United States crude oil production is still five per cent below the rate in April of last year, it is apparent that practically all fields outside of East Texas have succeeded in bringing output down to a point within market requirements. At the same time, East Texas production had reached a daily average of 251,000 barrels, compared with only 91,000 barrels in March. Subsequent events have increased output there to more than 350,000 barrels, placing that area foremost in the rank of producing districts of the country. Average initial production per well in East Texas during April was about 6,600 barrels, and drilling there continued unabated. Posted prices have been reduced to a minimum of 25 cents a barrel in practically all Mid-Continent districts, and a majority of the major purchasing companies have withdrawn postings on East Texas crude.

Gasoline

The demand for gasoline for the first four months of this year recorded a decline under the same period of last year. This was practically all due to a sharp slump in foreign demand. Exports for the first four months of this year, compared with last year, showed a decline of 30 per cent. Domestic demand, however, was practically the same as for last year. Domestic consumption for the four months ending April 30, 1931, amounted to 117,414,000 barrels, against 117,559,000 barrels last year. Exports for that period amounted to 15,642,000 barrels, against 22,474,000 barrels last year. As a result of severe competition in the retail gasoline market, wholesale prices of gasoline declined about 48 per cent below prices prevailing in April of last year. The events of last month brought gasoline prices down to a still lower level; showing a net decline under May of last year of 62 per cent.

The fact that domestic gasoline demand is practically the same for the first four months of this year as it was last year is construed as highly favorable. In fact, the actual consumption thus far is above expectations presented in the January 30 issue of The Oil Weekly. According to this estimate, domestic gasoline consumption for the first four months of 1931 was not expected to exceed a total of 112,873,000 barrels. Actually, the total was 117,559,000 barrels, exceeding the estimate by 4,686,000 barrels. This has to some extent offset the slump in exports of gasoline, which had been estimated to show a gain this year instead of a loss. On the whole, it is apparent that the oil industry is in a relatively better condition than most other industries, particularly as regards the demand for its products. In fact, if it had not been for the premature development of East Texas, the industry as a whole would have been able to show a fair profit on its operations this year.

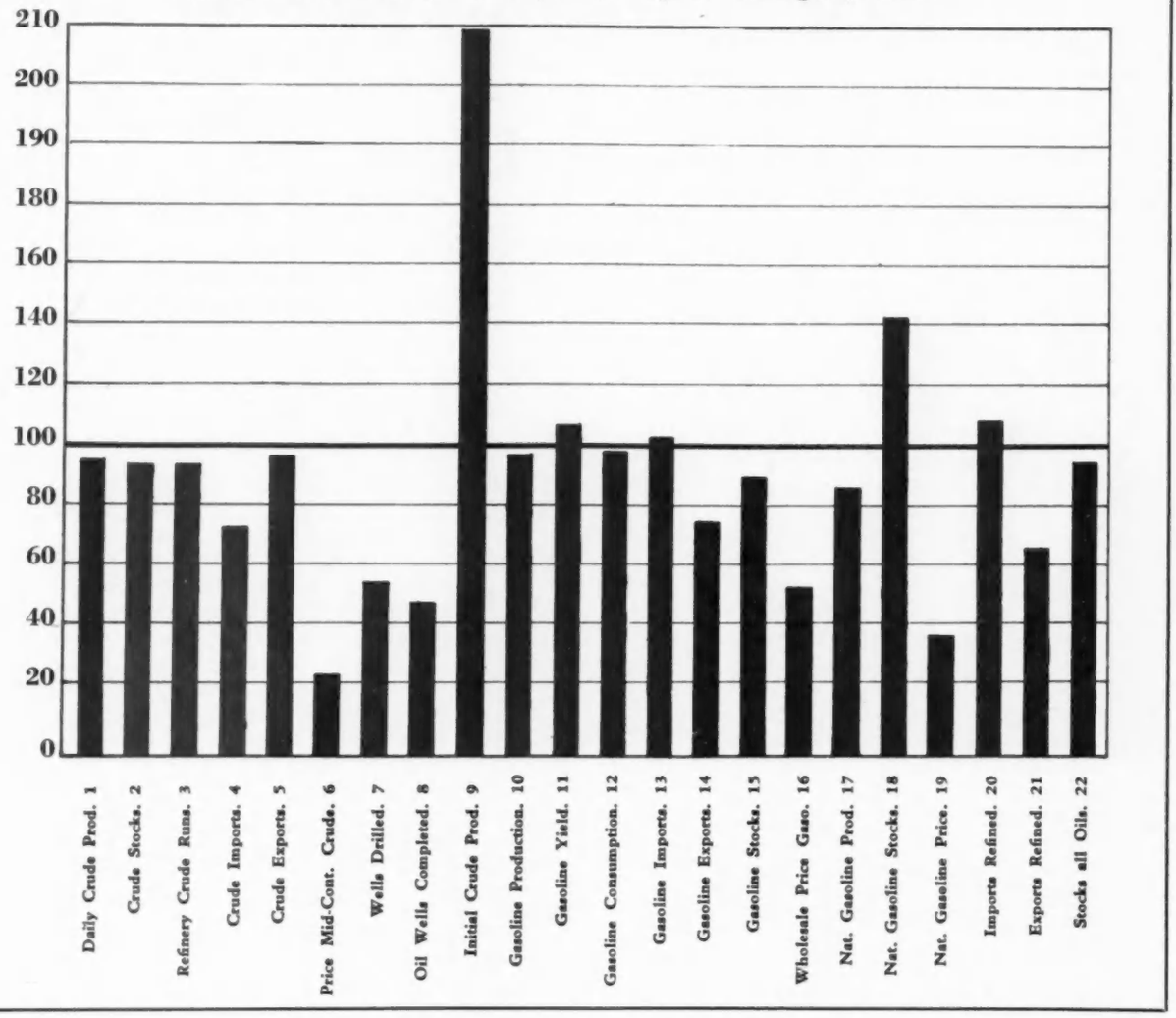
California Potential Figures Generally Conceded Too High

Los Angeles.—California's potential production, exclusive of Kettleman Hills, was 1,001,610 barrels, according to the latest report issued by the general committee on curtailment. Giving Kettleman Hills a potential of 75,000 barrels, which may be too high, the state total remains at about the same level recorded during the past few months. Declines have been shown in the potentials of several fields, while others have been boosted to higher figures.

A careful study of individual field potentials, particularly those fields which declined naturally during 1929, indicates that the estimated potentials are high. One independent engineer places the state potential at 850,000 barrels, while other engineers insist that a potential production of 1,100,000 barrels is not inconsistent. The potentials of flush fields were dropped during the month, this procedure being

(*Continued on page* 38)

Salient Oil Industry Factors for April, 1931, Expressed in Per Cent of April, 1930. Heavy Line (100) Represents April, 1930



Oil Industry Barometer—April, 1931

Index of Salient Factors—Current and Cumulative

	Factors—	This Month			4 Months Ending April 30		
		Last Year	This Year	Index (a)	Last Year	This Year	Index (a)
1	Daily Average Crude Production (Thous. Bbls.)	2,573	2,437	95	2,573	2,243	87
2	Total Crude Stocks (Thous. Bbls.)	535,727	497,983	93	535,727	497,983	93
3	Refinery Crude Runs (Thous. Bbls.)	80,434	74,706	93	313,263	283,577	91
4	Crude Imports (Thous. Bbls.)	5,781	4,162	72	20,379	17,019	84
5	Crude Exports (Thous. Bbls.)	1,900	1,826	96	7,383	7,014	95
6	Posted Price 36 Gravity Mid-Cont. Crude (Per Bbl.)	$1.29	$ .29	22(b)	$1.29(b)	$ .78	60
7	Wells Drilled*	1,702	905	53	6,627	3,695	56
8	Oil Wells Completed*	1,023	479	47	3,840	1,693	44
9	Initial Crude Production (Thous. Bbls.)*	776	1,857	239	3,118	3,818	122
10	Gasoline Production (Thous. Bbls.)	38,157	36,601	96	146,487	135,883	93
11	Gasoline Yield—Average Per Cent of Crude (d)	41.88	44.54	106	41.36	42.86	104
12	Domestic Gasoline Consumption (Thous. Bbls.)	34,549	33,400	97	117,559	117,414	100
13	Gasoline Imports (Thous. Bbls.)	1,319	1,348	102	4,720	5,019	106
14	Gasoline Exports (Thous. Bbls.)	5,731	4,187	73	22,474	15,642	70
15	Gasoline Stocks at Refineries (Thous. Bbls.)	54,435	48,587	89	54,435	48,587	89
16	Refinery Price U. S. Motor Gaso.—Group 3 (Cents)	6¾	3½	52(c)	6⅝(c)	3¾	57
17	Natural Gasoline Production (Thous. Bbls.)	4,428	3,824	86	17,662	15,643	89
18	Natural Gasoline Stocks (Thous. Bbls.)	709	1,006	142	709	1,006	142
19	Price Grade "A" Natural Gasoline, Group 3 (Cents)	6½	2¼	35(c)	5¾(c)	3¼	57
20	Imports of All Refined Oils (Thous. Bbls.)	3,214	3,458	108	13,957	14,041	101
21	Exports of All Refined Oils (Thous. Bbls.)	12,482	8,164	65	47,369	33,488	71
22	Total Stocks of All Oils (Thous. Bbls.)	698,689	656,293	94	698,689	656,293	94
	Weighted Index of Supply	.....	.....	110	.....	.....	100
	Weighted Index of Demand	.....	.....	85	.....	.....	85
	Weighted Index of Prices	.....	.....	36	.....	.....	58

*Exclusive of Rocky Mountains. (a)—Last Year—100.
(b)—Weighted Average. (c)—Monthly Average.
(d)—Straight run and cracked gasoline only.

Deterding Analyzes World Situation

By ROY E. LEIGH
Associate Editor

THE "Annual Report of the Royal Dutch Company for the Working of Petroleum Wells in the Netherlands Indies," coming as it does from occupants of the top rung of the industry's ladder, always commands attention throughout the world. As a matter of fact, the report for the fiscal year 1930, recently released over the signatures of Sir Henri Deterding, general managing director, and J. E. F. de Kok and J. B. Aug. Kessler, managing directors, is written not for share-holders alone but for the whole world of oil, as it concerns itself to less extent with figures of florins, representative of the company's income and profits, than to a general analysis of the position of the industry at large and to the effect upon it of outside influences, political and economic. The production, manufacturing, and sales activities of the Shell Group are so extensive as to mesh, at one point or another, with every important cog of the world's industrial, economic, and political machinery; and considered expressions by the managing directors of such a vast enterprise are worthy of closest attention by oil men lacking in the facilities for world vision which are at their command.

The current report is of more than usual interest, in that it deals incisively with a very unusual state of affairs. Indeed, it is more than possible that it contains the first utterance of a war-cry of which the oil industry may hear more in future.

"Naturally, we could not think of abandoning any part of our trade, no matter where, ... and, needless to say, there is no legitimate reason why we should abandon any part of our business to others."

Warning of Price War

This may—and by reason of its broad wording—probably does refute reports which have gained general currency during recent months of Shell's intention to withdraw from the United States. It is immediately followed, however, by a pointed reference to Soviet price-cutting; and it is probable that it is aimed more directly toward Russia than toward America.

The annual report of the Astra Romana Societe Anonyme, Roumanian operating subsidiary, is devoted in part to a discussion of the short-lived Conservation Agreement of 1930, causes which led to its adoption and subsequent failure, and to arguments in favor of its resuscitation.

It also contains a warning to the effect that those who have accepted restriction voluntarily cannot be expected to continue to bear the burden indefinitely and to regard with indifference the spectacle of other countries raising their oil output to such a level as can only be absorbed by a fierce battle in the world's markets.

This is a warning which Roumanians and Russians might well take to heart. Neither country, if American and European support were withdrawn, could hope to survive such a "fierce battle" as the next international price war may turn out to be. Russian and Roumanian oil fields are admittedly fertile; but, lacking strong support, neither could expect its economic organizations to survive in such a flood of oil as America, Venezuela, Persia, and Iraq could produce if restrictions were withdrawn.

As a matter of fact, the red thread of Russia is woven throughout the fabric of the Royal Dutch report. Sir Henri Deterding, dominant personality of the Royal Dutch-Shell organization, is a fighter, as one suspects, by instinct and inclination; and, whatever may be the ultimate outcome of the struggle between what we call communism and what the Soviets call capitalism, there can be no expectation of surrender on his part. The personality of this redoubtable Dutchman asserts itself in every line of the report; and, likewise, there can be no doubt of his confidence in ultimate victory.

At a time when lesser prophets throughout the world are predicting the success of communism's political and industrial schemes, Sir Henri reiterates his certainty of their failure.

"The manifest contradiction in this plan, on which it is bound to go to wreck, seems so far to have escaped notice and, regarded from a political point of view, the Soviet plans are none the less dangerous on this account."

This "manifest contradiction" refers to the exportation of petroleum and other basic commodities needed at home, if the country's industrial structure is to be of sound and enduring growth.

"If, as the Soviets are so anxious to predict, Russia were indeed to become an industrial country of the same importance as the United States, then this would mean that with its present oil production of 17,000,000 tons [122,000,000 barrels per annum] it would have to satisfy a demand of at least 135,000,000 tons [972,000,000 barrels], the figure for the 1930 consumption in the United States with a population of 120,000,000; in the past year Russia with a population of 160,000,000 consumed only 60 per cent of its production (10,000,000 tons), so that if Russia is ever to become the equal of the U. S. A. its petroleum consumption would have to be increased by 125,000,000 tons [900,000,000 barrels], even disregarding for the moment the difference in population between the two countries. Nobody would believe that the Soviets can command these 125,000,000 tons out of Russian soil; just as the South African government, for instance, could not well order a doubling of South Africa's gold production, neither would the Russian soil answer to a Soviet decree that another hundred million tons are to be produced more than has hitherto been possible. And yet the world is allowing itself to be impressed by the Soviet plan of making out of Russia an industrial country of the first im-

Impressions from the Current Annual Report of the Royal Dutch Company

Sir Henri Deterding retains his vigor.

A redoubtable Dutchman.

How he loves a scrap!

He calls a spade a spade,—and he also calls names.

He also says "I told you so!" to the Roumanians.

He never misses an opportunity for a telling shot: "—according to Soviet statistics, which cannot be verified—"

Whatever may be the outcome of these turbulent times, he expects to be in at the finish.

Deterding has taken the depression apart,—he knows what makes it tick,—and is still hopeful of the future.

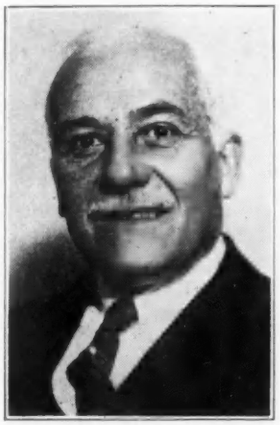
Salvation seems to lie in cooperation.

Politicians, tinkering clumsily with the machinery of production and distribution, economics and government, are the cause of this greatest depression of modern times.

If only pettifogging local demagogues had his facilities for world vision!

Sir Henri does not say so,—"This is not the place to go into any details in this matter,"—but it is obvious that France and Britain, hoarding gold against military needs, purchasing yellow metal with the silver specie of their colonies, and depreciating the currency of China in consequence, are equally capable with Russia for having caused this depression. (A European writing this probably would blame it on America.) The Soviets took 160 million consumers out of the world market. The combined actions of the French and British reduced the purchasing power of 800 millions.

How remote are Russia, India, Indo-China, and China!—and yet shocks resulting from their fiscal changes are felt here in Harris County, Texas,—and wherever you are, dear reader, be it in Venezuela, Borneo, Argentina, Roumania, or California,—in engine house, counting house, or warehouse.



SIR HENRI DETERDING, *K.B.E. General Managing Director, Royal Dutch Oil Company*

Undoubtedly Shell expects to continue doing business at the same old stand, despite curtailment in drilling production. "Old and impracticable office buildings are being abandoned for new up-to-date buildings," thus longheadedly taking advantage of current low construction costs. The head offices at The Hague have been enlarged by 40 per cent; new offices have been built in San Francisco and Hamburg; others are nearing completion in London, Paris, Berlin, and Brussels; and others are planned for erection in Sydney, Capetown, Victoria, "and several other places."

portance and at the same time considerably increasing their petroleum exports."

"It is much to be regretted," in the words of the report, "that more and more notice is being taken of the Soviets' own representation of the state of affairs and that a feeling is thus being created as if nothing could be done against their policy."

Reading between the lines of the report, one suspects that Sir Henri proposes to do something about it; that he is now striking the key-note of some future campaign.

"The threat, for instance, of Soviet organizations to force down prices still lower if they are not enabled to replace their natural market in their own country by dumping in others, is certainly no reason for temporarily abandoning the field to them. On the contrary, if every petroleum industrialist lends his cooperation, the world's consumption may be considerably increased if only Russia is enabled to consume what the population is anxious to consume but what the Bolsheviks do not allow.

"It is an incontestable truth that if the population of Russia could itself obtain the petroleum products at the same low price for which the Soviet government is selling them abroad, there would be practically no export of these products at all."

The report includes statistics indicating a decline of 5 1/3 per cent in world oil output during 1933, a cooperative reduction achieved "notwithstanding Russia's attitude." "Russia alone is holding aloof from the policy of restriction adopted by all oil-producing countries in the past year."

Under-consumption, Not Over-production, the Cause of Depression

"To our minds, it cannot be denied that the main cause of (current) unsatisfactory prices must be under-consumption and not over-production. . . .

"Now what is the reason for this serious slowing-down of demand? There are two major causes of this phenomenon to which we would call special attention.

"The first is Russia.

"In that country 160,000,000 people have been forced by the Bolshevik regime into the service of their five-year plan. Their living conditions are such as no other people have ever been subjected to. Their working conditions are largely those of forced labor. Freedom of movement—not to speak of freedom of thought—no longer exists, and the Soviet government has, moreover, decreed a drastic reduction in consumption and an unheard-of lowering of the standard of living, in order to start dumping large quantities of all sorts of commodities in foreign markets, so as to acquire the necessary funds for their expensive five-year plan. We therefore see that, as consumers, 160,000,000 Russians have practically disappeared from the market, even agriculturists not being permitted to use their own production as they wish, and the Soviets have appeared as suppliers of a number of commodities in competition with other producers who are already hard hit by the practical disappearance of Russia as a consumer.

"The second reason for the drop in world consumption which we would mention here is the silver problem.

"This is not the place to go into any details in this mat-

Ir. J. E. F. de Kok
Managing Director, Royal Dutch Oil Company

Ir. J. B. Aug. Kessler
Managing Director, Royal Dutch Oil Company

ter, but the result of a number of measures taken by several governments is that the value of silver expressed in gold has been dropping over a period of years, and this drop culminated in 1930 during which silver lost not less than 40 per cent of its already very seriously reduced value.

" . . . Now two huge countries—China and India—have in the past accumulated an enormous stock of silver. This silver stock has, during the last few years, gradually declined in value, but not in volume, and consequently the same stock is at the present day worth considerably less than it was say three years ago. Of this decline a very large part occurred in 1930. It is, therefore, not surprising that China and India, with a population of 800,000,000 have lost purchasing power. To that extent they had to disappear from the market as purchasers of European and American products, . . . "

"If the silver problem is to be satisfactorily solved, the bi-metallic standard will have to be reinstated, thus bring the silver value up to where it belongs. . . .

"The way out of the present world depression can in our opinion only be found in a considerable increase of consumption. While waiting for better times, however, and seeing prices falling in spite of his voluntary sacrifices in restricting his production, it is quite understandable that the oil producer should become impatient and lose faith in the beneficial effect of conservation. In our opinion, however, it is wrong to plead that conservation should cease, and those who are doing so are looking at things in the wrong light.

"It is true that prices have not improved during this period of conservation, but what would they have been if there had been no conservation? Of course they would have been much lower. The fact that conservation has not resulted in bringing prices to a satisfactory level only proves that the over-production and the accumulation of stocks has been so serious that even a year of conservation could not result in a reasonable price for crude oil and its products. Why should large sums be expended on the drilling of wells in order to get increased production when the accumulated stocks and the yearly production are sufficient to meet all consumption for a number of years?

Technical Advances

"Moreover, the fact must not be lost sight of that the technical side of the crude oil production business has made rapid strides during the last few years. We can drill much deeper wells in a shorter time than we could in the past. The geological methods also have been improved enormously, and the result is that we find oil where we never thought there would be any, and once we know that there is oil in a certain place we can develop a field very rapidly.

"We really had no right to expect that this development in the technical side of the oil business would synchronize perfectly with the increasing demand. Of course it would have been too much good luck if it had. . . .

"Compared with other industries the oil industry has considerable advantages. The technical improvement of a large number of industrial processes and the normal development of modern life tend to create an ever-increasing demand for petroleum products in more and varied forms. Consumption in the future will, we are convinced, always be very large. Up to the present motor traffic has been limited in most countries owing to a lack of good roads, etc.; aviation and the use of Diesel engines and so many other factors open up to the petroleum industry such marketing prospects that to anyone versed in these matters the feeling inspired cannot be other than optimistic. If all pull together, the near future will be a good one and the farther future bright, but should there be a lack of cooperation, then the near future will be very dark for many, whilst the more distant future will have to bear the consequences of the damage about to be done.

Future Hopes Based on Cooperation

"Cooperation in the restriction of production will help the industry to tide over the most difficult period it has yet known and will bring it forth healthy and strong into a future that can be nothing but a bright one for the petroleum industry. . . . "

Speaking of cooperation, and the lack of it, Sir Henri calls a spade a spade—and he also calls names.

Recounting the history of the abortive cooperation restriction agreement in Roumania, it is explained that:

"In October, 1930, the Steaua Romana nevertheless gave notice of termination of the conservation agreement. We did all we could to prevent this notice being given. We were at all times prepared to consider suggestions to improve the application of the conservation agreement, but we are sorry that we must add here that no other company made any suggestions of a constructive nature to that effect. Notwithstanding our advice that it would be a catastrophe, not only for the Roumanian oil industry, but for Roumania itself if a period of reckless overproduction should set in—and this was bound to happen if conservation came to an end—and that if discussions were considered necessary for an improvement of the conditions of the conservation agreement, these conditions should not be made more difficult by first bringing the conservation agree-

(*Continued on page* 75)

The Proration of Production Within the Field

By ROBERT E. ALLEN

A METHOD embodying the best features of proration methods now in use has been devised to serve as a general plan of proration equally applicable to town-lot and large acreage fields. The proposed plan recognizes potential production and the relative worth of a property as the fundamental facts of proration but gives variable consideration to each depending on the degree of development of the property as compared with the development of the field.

The production quota of the field is divided: a percentage of the field equal to the percentage of field development is prorated on the basis of potential production and the balance is prorated on the basis of relative worth which is acreage adjusted for variable productivity. The marginal well is considered and a method offered for its consideration.

The sliding scale plan of proration encourages orderly development, penalizes excessive drilling, gives due consideration to undrilled acreage, partially recognizes investment, protects marginal wells and establishes equitable production relationships.

This paper was read before the American Petroleum Institute, Division of Production, mid-year meeting at Dallas, June 3, 1931.

PRORATION has now been with us long enough to have demonstrated some of its fundamental principles and to have eliminated many of the non-essential ideas with which it was first encumbered.

The groping efforts that characterized proration at its inception have given way to more certain directness of aim and somewhat surer progress, but there is still much progress to be made in making proration entirely equitable and satisfactory in its application.

The fundamentals of proration are simple. The only data available on which to base proration are potential production, acreage and extent of development. These factors may be used in their simplest form or may be so combined as to form other and perhaps better factors.

We know that in allocating the field quota among the various properties we should be guided in some way by these factors and we know also that no single property should receive an allotment greater than its potential production nor large enough to permit unfair concentration of production from groups of offset wells. We are also aware that it is contrary to the present principles of proration to require a well or property to curtail to the point of suspension.

This is about all we have to start with in our study of proration. The wide range of possibilities offered by these few factors is probably sufficient for any present consideration of the problem. It is the aim of this paper to present a brief analysis of the problem and to offer a method of solution that is intended to be more practicable and more equitable in its application to difficult or unusual fields than procedure previously used.

To be successful and lasting, any method of prorating production within a field should:

1. Maintain the production of the field at either a specified quota or at a certain percentage of its potential.
2. Discourage and penalize all unnecessary drilling and the resulting increase in potential.
3. Recognize and reward such drilling as may be really necessary.
4. Protect all reserving marginal wells from forced suspension.
5. Establish equitable production relationships between the various producing units of the field.

Field Quota

The maintenance of field production at a specified amount is of course the first and most important function of proration within the field. The field quota may be either a fixed amount as dictated by the outlet or by some authorized body, or it may be some definite percentage of the actual or estimated potential of the field. The tendency is toward the establishment of arbitrary quotas for different fields regardless of their potential production and this practice will doubtless become more pronounced as its advantages are better realized. However, the source of a field quota is of little importance as compared to the distribution of that quota within the field.

It is now well recognized that the potential production of a field has what might be called a "menace value" and it is this menace value which leads to market unsettlement and consumer indifference. In effect, potential production has practically the same influence on the oil market that excessive futures have on the grain market. Impending conditions very frequently exert a greater influence than actual present conditions. It is interesting to speculate on the extent of decline in potential which would result in an oil shortage panic of the same degree as the one occasioned by present over-production.

The discouragement of all unnecessary drilling is therefore one of the important functions of field curtailment. Drilling may be considered as being unnecessary where it may result in either an increased ultimate recovery or an increased rate of recovery from the property in question as compared with adjacent properties. It is not too much to say that field proration should promote and encourage orderly development and uniform recovery and should severely discourage excessive drilling and

irregular production practices. Furthermore, such discouragement should be made at least partially retroactive where needed.

As a corollary to the discouragement of unnecessary drilling there should be some provision for the recognition and reward of drilling that must really be done to protect a property from drainage or to enable the recovery of a proportionate amount of oil. Then there is the drilling which while legally required is economically unjustifiable and which should be recognized as necessary drilling, but as unnecessary production.

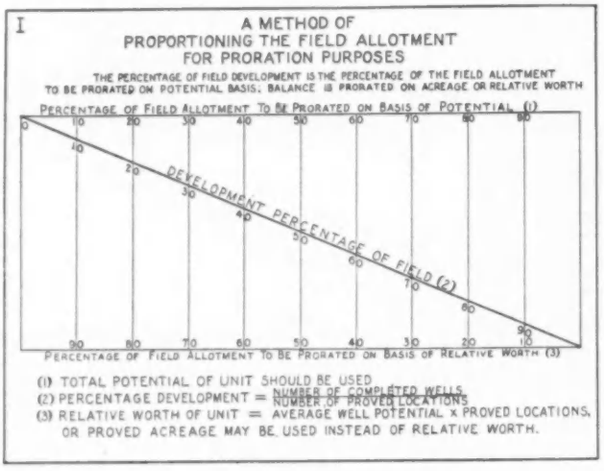

I
A METHOD OF
PROPORTIONING THE FIELD ALLOTMENT
FOR PRORATION PURPOSES
THE PERCENTAGE OF FIELD DEVELOPMENT IS THE PERCENTAGE OF THE FIELD ALLOTMENT TO BE PRORATED ON POTENTIAL BASIS. BALANCE IS PRORATED ON ACREAGE OR RELATIVE WORTH
PERCENTAGE OF FIELD ALLOTMENT TO BE PRORATED ON BASIS OF POTENTIAL (1)
0 10 20 30 40 50 60 70 80 90
DEVELOPMENT PERCENTAGE OF FIELD (2)
90 80 70 60 50 40 30 20 10
PERCENTAGE OF FIELD ALLOTMENT TO BE PRORATED ON BASIS OF RELATIVE WORTH (3)
(1) TOTAL POTENTIAL OF UNIT SHOULD BE USED
(2) PERCENTAGE DEVELOPMENT = NUMBER OF COMPLETED WELLS / NUMBER OF PROVED LOCATIONS
(3) RELATIVE WORTH OF UNIT = AVERAGE WELL POTENTIAL x PROVED LOCATIONS, OR PROVED ACREAGE MAY BE USED INSTEAD OF RELATIVE WORTH.

PLATE ONE

The principle of sliding scale proration. The percentage of the field allotment to be prorated on a potential basis is always equal to the percentage development of the field. The balance of the field allotment is prorated on basis of acreage or relative worth of the properties.

In effect, the application of a rule in regard to drilling would be to establish for each property a fair rate of production which will eventually result in proportionate and equitable recoveries from each property. If one operator has already developed a potential which would result in an unfair rate of recovery his curtailment as based on potential should be such that the rate of recovery is reduced to normal. If another operator has lagged behind in his drilling program he should be assured of receiving an adequate allotment for each necessary well completed and in the meantime he should receive as large a portion of his ultimate maximum allotment as he may produce without producing his offset wells at a higher percentage of their potential than that prevailing on adjacent properties.

Marginal Wells

At its inception curtailment was based entirely on potential production or ability to produce. As proration has progressed there has been a steady tendency toward the consideration of modifying factors, not the least of which is the ability of an operator to curtail. The marginal well is being given more and more consideration by curtailment committees everywhere and it is probable that very definite concessions will soon be made to the entire class.

The marginal well was originally an edge well of small production but the term has grown to include all wells or properties that for some good reason cannot take the full percentage of curtailment assigned the field and remain in operation. The good reasons may include small production, water trouble, production difficulties, financial condition of the operator, legal agreements, etc. All of these have been presented and accepted as justification for the establishment of minimum allotments for such wells below which amounts they need not be curtailed. The derivation of these minimum allotments is an interesting study in itself and will be further considered.

Proration is bringing about a gradual change in the opinion of operators on the subject of recoverable reserves. Many an operator formerly considered that he was entitled to all the oil he could produce regardless of the possible rights of his neighbors and in this belief he spent money that not only resulted in excessive drilling but which might very frequently have been left in any bank to better advantage. This idea is giving way to the principle that rate of return on investment is often more important than total return when the attached risk is considered.

While an operator does not wish to suffer a loss of oil to his neighbor it is evident that it is cheaper to prevent such a loss by restrictions of some kind on the neighbor rather than by protective drilling. Encouraged by courts and and by some splendid examples of unit operation, operators are coming to the conclusion that an oil pool is the joint property of all producers, each of which has only a proportionate interest therein and the right to produce that interest only at a rate commensurate with that of other producers. More and more frequently are proration programs being required to correct and prevent inequities of production and to establish the proper production relationships between various producing units.

An investigation of the possible facts upon which to base proration shows that only three are at all practicable. These are:

1. Size of property (acreage or reserves).
2. Degree of productivity (potential).
3. Capital investment (development).

Each of these has its proponents and its arguments in favor of its use as the basis of proration. These arguments are too well known to mention here but it may be noted that each base has its objections as well as its advantages.

In analyzing the possible application of each of these bases it was considered advisable to determine how each would apply to fields of opposite extremes of character. At one extreme is the newly discovered field in which development is just starting. There is no longer much argument against developing such a field under unit operation if at all possible. Under unit operation, returns to individual members are generally prorated according to acreage, either proved or initial, although occasionally adjustments have been made to reflect the varying reserves of widely different parts of the field as determined by drilling. It may be said then that for the new field proration should be based either on proved acreage or on recoverable reserves.

At the opposite extreme is the old, completely developed field where drilling has long since ceased and where principal difference between properties is their rate of production which can be determined within very close limits. Obviously enough the only thing to consider in prorating such a field, if it must

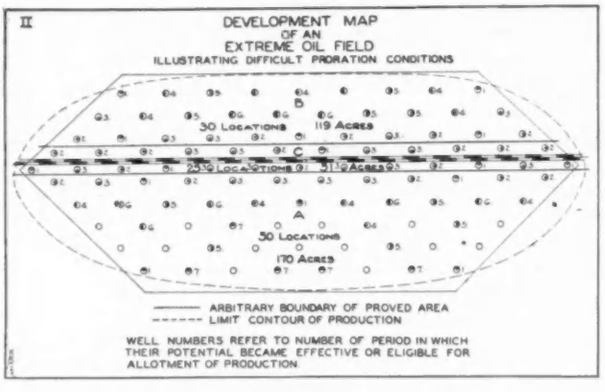


PLATE TWO

A hypothetical oil field illustrating the range of difficulties frequently encountered in the proration of irregularly owned and unevenly developed fields. Property C, which is a railroad right of way, is representative of the close well-spacing and rapid development so often found in town-lot areas. Property A represents a large lease undergoing orderly and unhurried development. Property C is an approximate mean between A and C and represents a fair average for the field.

be prorated, is the potential production of the various properties. There is no need to consider acreage because the proper value of each acre is already apparent and there is likewise no need to consider investment because the expenditure for drilling has already been amortized if it ever will be. For settled, completely developed fields then, the use of potential production as the basis of proration is indicated.

It is apparent that if capital investment is to be considered at all it will be in the case of some partly developed fields where notable irregularities of development are present. It has been urged that some consideration must be given to the fact that it costs as much to drill a poor well as a good one, and also to the fact that actual cash outlay is much more important to most of us than are the resources which may be recovered by such expenditure. It is probable that investment may be satisfactorily considered indirectly, if at all.

Acreage and Potential

For practical purposes then it may be concluded that between the extremes mentioned lie all oil fields. Proration should be based on acreage or reserves at one extreme and on potential production at the other extreme. It seems logical therefore, to suggest that fields intermediate between these extremes be prorated upon some combined basis involving both acreage and potential. This of course has already been done in the case of some prominent fields by dividing the total field allotment into two equal or unequal portions, one of which is distributed to properties on the basis of their potential production and the other on the basis of proved acreage.

The division of the field quota has usually been arbitrary or by compromise. It is here suggested that the percentage of development of the field be considered as the determining factor in the establishment of the portion of the quota to be prorated on the basis of potential production. If an old field which is 100 per cent developed is prorated entirely on the basis of potential production it seems reasonable to say that a field only 40 per cent developed should have 40 per cent of its total allotment prorated on the basis of potential, and the remaining 60 per cent on the basis of acreage.

In making a study of the application of the suggested method of dividing the field allotment it was found that there were numerous other cases where some improvements or refinements in the method of field proration were necessary in the interests of equity and fairness. The more important of these special problems will be considered separately.

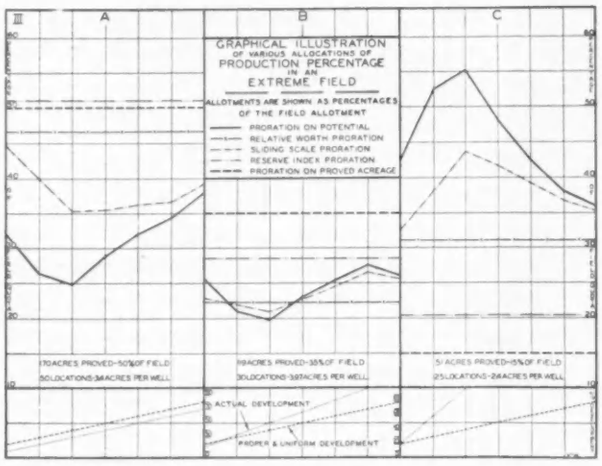


PLATE THREE

The percentage allotments of the three properties for seven successive periods, and as determined by five different methods of proration are here shown graphically. The various degrees of property development at different periods are also shown, together with an ideal uniform development curve for each property. It will be observed that three of the proration methods used may result in practically constant allotments to each property regardless of its potential or degree of development. Proration on the basis of potential results in allotments that give no consideration to undrilled acreage or reserves. The sliding scale percentage allotments have the effect of penalizing development which is greater or less than the average for the field, and of rewarding uniform development.

Potential Production

Potential production has been variously defined and interpreted but the most commonly accepted definition says that: "Potential production is the amount of oil the well is capable of normally producing at and during the specified time." It will be observed that the word "normally" is subject to very wide interpretation, and alternatives such as "most efficiently" or "through a one-inch bean," etc. have been offered and are in occasional but not general use. Then there is the time element, for while potential is usually expressed as barrels daily, such an amount may be and frequently is predicated on such very different figures as barrels per month and barrels per hour. Also there is the fact that two different operators can obtain considerably different production from the same well.

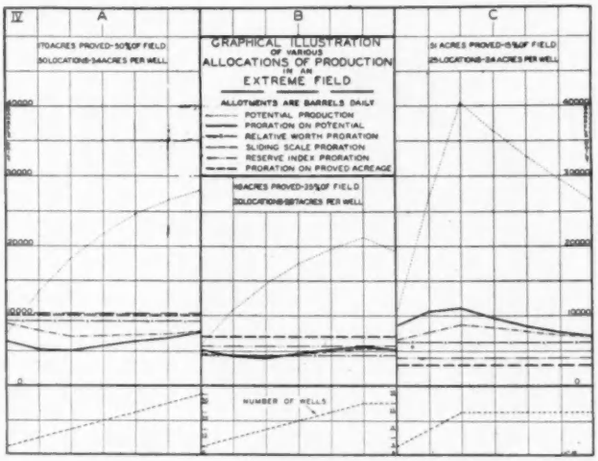


PLATE FOUR

The daily production allotments of the three properties as determined by five different methods for seven successive periods is here shown graphically. The differences between the five methods are not as apparent as in Plate Four but it is notable that the great increase in potential on property C due to excessive drilling resulted in only nominal and temporary increases in the property allotment. The effect of large acreage in maintaining the allotment of property A is also apparent.

Everything considered, "potential production" should be retained as a term designating the relative productivity of a well or property. However, there is room for much improvement or standardization in the definition of the term. Various substitutes for "potential production" have been proposed, such as "pressure drop," "differential pressure," etc. These are acceptable in many cases but are not universally applicable. At present the most satisfactory measure of potential production is the amount of oil produced under prescribed conditions during the longest test possible.

Total Potential vs Average Potential

The chief objection to using the total potential of a property as the basis of its allotment is that drilling is thereby encouraged and the evil effects of an increasing potential are sought for rather than avoided. The best solution of this problem has been through the use of an average well potential rather than the total potential. The average well potential is the total potential of a producing unit divided by the number of wells thereon. It is evident that additional drilling on a unit already partly developed would be just as likely to decrease as to increase the allotment of the unit depending upon whether the new well was larger or smaller than the average of the others. Of course, additional drilling might be absolutely necessary to protect the property or to adequately drain it but such drilling would merely result in producing the same amount of oil from more wells.

Unfortunately the use of the average well potential as the

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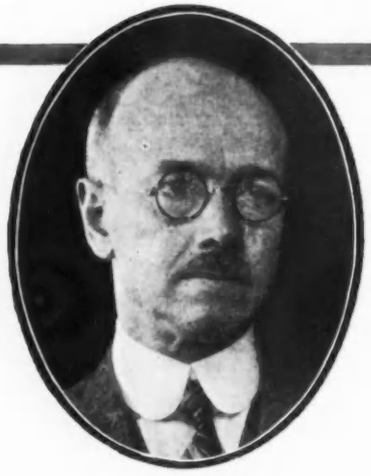
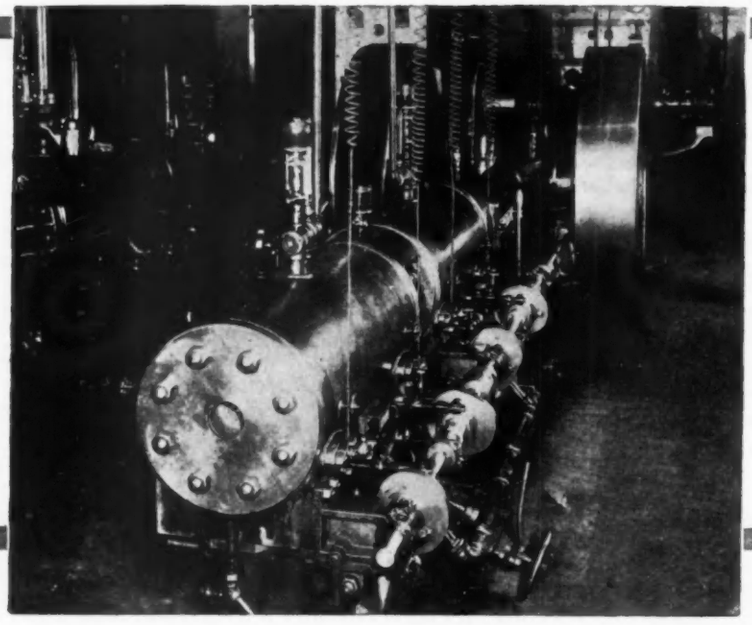


S. B. DAUGHERTY

Our Engineering Division has been particularly strengthened by placing Mr. S. B. Daugherty in full charge of our development work, and by the employment of Mr. C. E. Sargent as Mr. Daugherty's assistant.

These two men are prominent figures in gas engine gas compressor design and consulting engineering. They brought to **TRANSIT** a wealth of technical experience, together with a broad practical knowledge gained in the field by intimate contact with gas men and their problems.

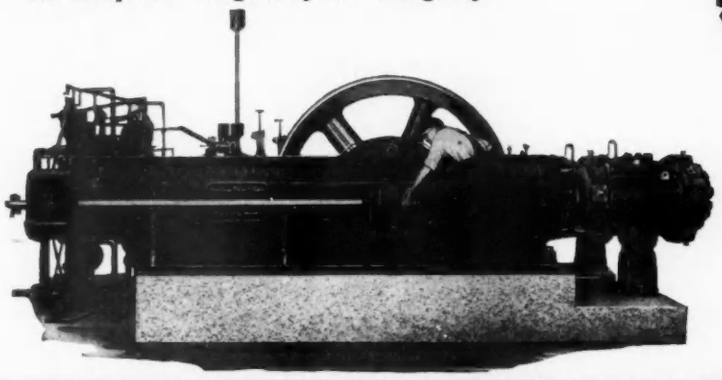


John Scott Medal of the Franklin Institute, awarded to Mr. Sargent in 1907 for his original work on this engine.

The first tandem, double acting, four cycle, complete expansion gas engine. On display in the Ford Museum at Dearborn, Michigan. Designed by Mr. Sargent in 1897.

Experienced *is making* TRANSIT *success!*

TRANSIT 17 x 24" Twin, Four Cycle, Single Acting, Direct Connected, 170 H. P. Gas Engine Gas Compressor designed by Mr. Daugherty.



A TRANSIT compressor valve removed from natural gas compressor after three years (18,802 hours) of service. Discharge pressure 150-250 lbs.

Our Development Department is studying the application and design of TRANSIT gas ENGINES and Gas Compressors to the end that these products will exactly meet the requirements of the natural gas industry.

The problems of fuel economy and compressor valves have already been solved with so much success that we just can't see how anyone can justify the selection of compressing equipment of any other make.

You owe it to yourself to investigate.

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REFINERY PUMPS
FOR HOT OIL
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GAS ENGINE GAS COMPRESSORS
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basis of proration also has its flaws, chief of which is the requirement that all producing units be of the same area and under the same general method of development if the principle in its simplest form is to be used.

In a field having properties of irregular shape and size the application of the average well potential as a basis of proration must be preceded by the division of the field into producing units of equal area or by the computation of an adjusted average well potential for each property. If the field is divided into equal producing units it is desirable that the area of each unit should not exceed 40 acres.

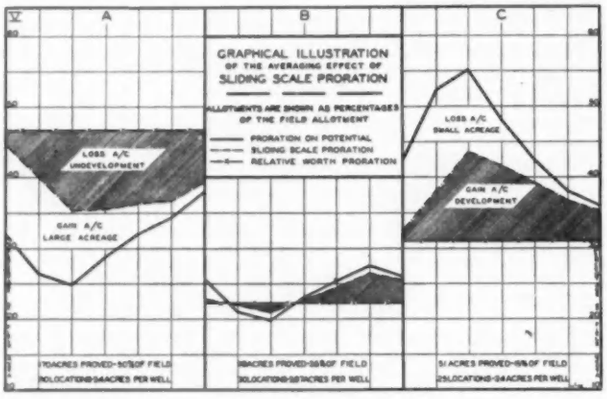


PLATE FIVE

The actual averaging effect of sliding scale proration is shown in this illustration. The relative worth proration is in effect a correction to prorate allotments on the basis of uniform development and it is therefore used as a basis of comparison. It will be seen that property C derives a certain increase in allotment due to drilling investment and increased potential but is prevented by its relative worth from fully realizing an allotment based entirely on its potential. Property A with conditions reversed is limited only by under-development from receiving the full allotment which its relative worth merits. The slight fluctuations of average property C are also evident.

A factor representing the adjusted average well potential of a property is found by multiplying the actual average well potential by the proved acreage of the producing unit. The factor thus determined is meant to be used as a substitute for total potential but peculiarly enough it also provides probably as good an index to the current relative value of the property as can be found and as such is eligible for use as a factor expressing an acreage adjustment to compensate for differently productive acreage.

Producing Unit

Reference has been made to the producing unit. This is understood to mean that property or portion thereof which may be considered as a unit for the purpose of equalizing drainage. There are many oil fields having large irregularly shaped properties together with many smaller properties. It is often necessary to arbitrarily divide the large property into units having approximately the same average well potential as the adjoining properties. Hence a property may consist of several units each of which is individual for proration purposes.

Proved Acreage vs Reserves

It has been frequently pointed out that it is fundamentally unjust to give the worst acreage of the field the same rating for proration purposes as the best acreage. This is true despite the fact that better structural position may not mean greater ultimate recovery, especially if structurally inferior properties are developed first. The areal extent of a property is satisfactory for use in determination of the adjusted average potential of the property but has only a secondary bearing on the actual recoverable reserves of the property. It is urged therefore that the portion of a field allotment which is not prorated on the basis of potential production be prorated on the basis of the recoverable reserves of each property or some satisfactory equivalent.

It is well known that oil reserves are fugitive in character and depend as much upon the future rate of depletion of adjacent properties as upon the amount of oil actually present at any one time. There are many and various methods of estimating recoverable reserves but there is a singular lack of uniformity in the results obtained by using different methods. What is needed for proration purposes is some factor which will serve as an index to the relative worth of the property at the time of allocation. This factor should be of easy derivation and accurate enough to justify its use.

Factor of Relative Worth

If all operators in a field practice a uniform well-spacing program the adjusted average potential or reserve index previously mentioned furnishes an excellent basis for the comparison of the relative worth of different properties. However, there is the widest kind of variation in well-spacing in fields of the town-lot class and it is futile to use acreage as any component of a factor meant to furnish an index of the reserves of a town-lot well. To give recognition to an existing fact but not to condone an uneconomic practice it is suggested that the factor of relative worth for all fields having irregular or non-uniform well-spacing be obtained by multiplying the average well potential of the wells already completed on a producing unit by the number of proved normal locations.

This is a detail which does not concern fields of large acreage and uniform development but it is a vital matter for town-lot fields where the problems of proration are particularly intensified. As pointed out in the case of the reserve index, any factor obtained by combining average well potential with either acreage or locations may be considered to be either a substitute for potential or an adjustment for variable areal productivity and as such may be reasonably offered as a satisfactory basis of proration and in fact will often answer every practical purpose.

Degree of Development

In many fields there are properties almost identical except in degree of development. Two adjoining properties may have the same acreage, the same relative worth or the same reserve index; yet one property has twice as many wells and twice the potential of the other. Possibly one property was developed too rapidly or the other one too slowly but the fact remains

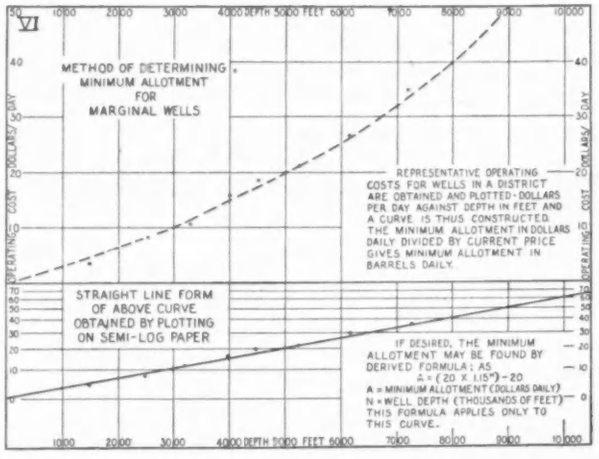
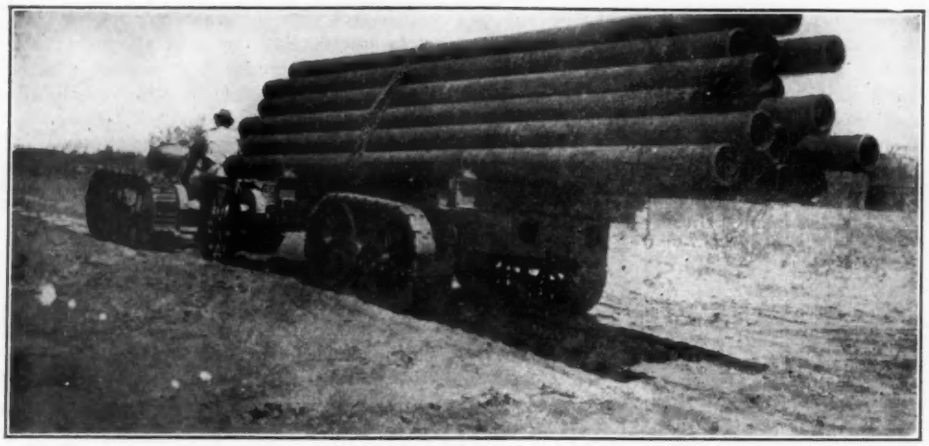

METHOD OF DETERMINING MINIMUM ALLOTMENT FOR MARGINAL WELLS
REPRESENTATIVE OPERATING COSTS FOR WELLS IN A DISTRICT ARE OBTAINED AND PLOTTED - DOLLARS PER DAY AGAINST DEPTH IN FEET AND A CURVE IS THUS CONSTRUCTED. THE MINIMUM ALLOTMENT IN DOLLARS DAILY DIVIDED BY CURRENT PRICE GIVES MINIMUM ALLOTMENT IN BARRELS DAILY.
STRAIGHT LINE FORM OF ABOVE CURVE OBTAINED BY PLOTTING ON SEMI-LOG PAPER
IF DESIRED, THE MINIMUM ALLOTMENT MAY BE FOUND BY DERIVED FORMULA; AS
A = (20 X 1.15^N) - 20
A = MINIMUM ALLOTMENT (DOLLARS DAILY)
N = WELL DEPTH (THOUSANDS OF FEET)
THIS FORMULA APPLIES ONLY TO THIS CURVE.
DEPTH IN FEET
OPERATING COST DOLLARS/DAY

PLATE SIX

The case of the marginal well is here considered and one method of determining a minimum allotment for it is shown. The method illustrated is based upon the smallest daily revenue which will justify continued operation of a well of any given depth. Operating costs vary so much in different districts that the above curve or formula may not be generally applicable but the principle involved may be applied to any district.



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that for the time being at any rate, one property will produce more oil than the other one unless some arbitrary power decrees equal production from both properties.

Common sense and good business judgment require at least a partial defense of invested capital even though the rate at which the investment was made might not be justified. A logical analysis of the problem thus presented indicates that the average degree of development of the field at the specified time should be the basis of making adjustments for the over-development or under-development of various leases. A property developed above the field average should receive a partial but not complete reward for its additional investment and likewise an under-developed property should receive partial but not complete credit for its undrilled acreage or relative worth.

Sliding Scale Proration

By definitely setting aside certain portions of the field allotment for distribution according to potential production and according to proved acreage, the first step has been taken toward providing for an equitable proration wherein the relative worth of all properties is the basic factor but where reasonable credit is given to capital investment as well as to delayed drilling.

The degree of development of a field is the percentage of the field allotment to be distributed on the basis of potential production. In this case the total potential of a producing unit should be used because it is the only factor which makes it possible to introduce a credit for investment with varying success.

The remainder of the field allotment should be prorated on the basis of proved acreage; relative worth factor or reserve index factor as conditions in the field may dictate. The two allotments thus obtained for each producing unit, when added give the total allotment for the unit and this total allotment will be found to be some amount, or percentage of the field quota intermediate between allotments obtained by proration according to acreage and proration according to potential. The exact position of the sliding scale allotment will depend on the relative development of the unit.

Marginal Well Consideration

In some fields proration, no matter how carefully designed, will succeed or fail according to its treatment of the marginal well. While some arguments to the contrary are presented, the present trend of proration is distinctly toward some degree of protection or special consideration for marginal wells. For practical purposes the marginal well or property is one which cannot make the average curtailment required of the field and still remain in operation.

In many cases the marginal well problem is only the old financial problem of making ends meet. Experience has shown us that as a geenral rule wells will be kept on production as long as the revenue obtained is greater than the actual cost of operation. The cost of operation at this desperate stage of the well's existence does not include any amortization of investment nor any excessive overhead but may include depreciation and interest charges if there are such.

On this basis of reasoning an effort has been made to develop a rule for the special consideration of marginal wells that will give them a minimum allotment sufficient to permit their continued operation under average conditions.

An example of the method used in determining the minimum allotment of wells is shown as Plate VI. The daily operating costs of a number of wells of varying depths and in the same district, were obtained and plotted. From the resulting curve a formula was derived which probably furnishes a fair and practicable method of assigning minimum allotments to wells

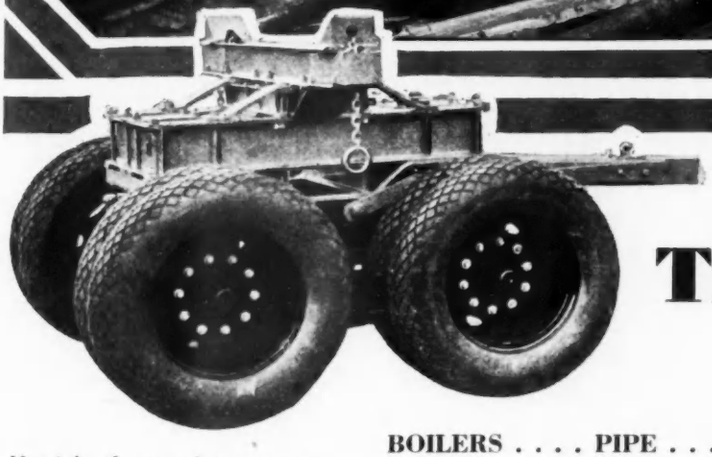
PRORATION SCHEDULE

Comparing Different Methods of Allocation in an Extreme Field

	Per Cent Developed	Proved Acreage B/D	Proved Acreage % Field	Relative Worth B/D	Relative Worth % Field	Sliding Scale B/D	Sliding Scale % Field	Reserve Index B/D	Reserve Index % Field	Prorated Potential B/D	Prorated Potential % Field	Actual Potential
A	10.00	10,000	50.00	9,320	46.60	8,905	44.53	10.210	51,05	6,380	31.92	7.500
B	16.67	7,000	35.00	4,470	22.35	4,560	22.80	5,710	28.55	5,110	25.53	6,000
C	20.00	3,000	15.00	6,210	31.05	6,535	32.67	4,080	20.40	8,510	42.55	10,000
Total	14.28	20,000	100.00	20,000	100.00	20,000	100.00	20.000	100.00	20,000	100.00	23 500
A	20.00	10,000	50.00	9,320	46.60	7,970	39.85	10.210	51.05	5,260	26.32	13,500
B	33.33	7,000	35.00	4,470	22.35	4,380	21.90	5,710	28.55	4,210	21.05	10,800
C	60.00	3,000	15.00	6,210	31.05	7,650	38.25	4,080	20.40	10,530	52.63	27,000
Total	33.33	20,000	100.00	20,000	100.00	20,000	100.00	20.000	100.00	20,000	100.00	51,300
A	30.00	10,000	50.00	9,320	46.60	7,050	35.25	10,210	51.05	4,970	24.87	18,225
B	50.00	7,000	35.00	4,470	22.35	4,200	21.00	5,710	28.55	3,970	19.86	14,550
C	100.00	3,000	15.00	6,210	31.05	8,750	43.75	4,080	20.40	11,060	55.27	40,500
Total	52.38	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	73,275
A	40.00	10,000	50.00	9,320	46.60	7,100	35.50	10,210	51.05	5,750	28.76	21 800
B	66.67	7,000	35.00	4,470	22.35	4,570	22.85	5,710	28.55	4,620	23.09	17,500
C	100.00	3,000	15.00	6,210	31.05	8,330	41.65	4,080	20.40	9,630	48.15	36,500
Total	61.90	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	75,800
A	50.00	10,000	50.00	9,320	46.60	7,240	36.20	10,210	51.05	6,400	31.98	24,625
B	83.33	7,000	35.00	4,470	22.35	4,915	24.57	5,710	28.55	5,100	25.49	19,625
C	100.00	3,000	15.00	6,210	31.05	7,845	39.23	4,080	20.40	8,500	42.53	32,750
Total	71.43	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	77,000
A	60.00	10,000	50.00	9,320	46.60	7,330	36.65	10,210	51.05	6,860	34.32	26,550
B	100.00	7,000	35.00	4,470	22.35	5,315	26.58	5,710	28.55	5,510	27.54	21,300
C	100.00	3,000	15.00	6,210	31.05	7,355	36.77	4,080	20.40	7,630	38.14	29,500
Total	80.95	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	77,350
A	70.00	10,000	50.00	9,320	46.60	7,845	39.23	10,210	51.05	7,600	37.99	28,000
B	100.00	7,000	35.00	4,470	22.35	5,105	25.52	5,710	28.55	5,210	26.05	19,200
C	100.00	3,000	15.00	6,210	31.05	7,050	35.25	4,080	20.40	7,190	35.96	26,500
Total	85.71	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	20,000	100.00	73,700

TABLE ONE

This table gives the allocation of production to properties A, B, and C of the extreme field as determined by five different methods of proration, and for seven successive proration periods. The figures as presented show the inequities arising from prorations based on potential and on acreage and also show the averaging effect of sliding scale proration. This table is the source of the data presented graphically in Plates Three, Four and Five.



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Martin's three point suspension with rocking bolster effect over front axle permits easy moving over rough places without strain or cramp of frame. Provision is also made for front axle turning sufficient for trailer to follow truck around curves without skidding wheels or wearing tires. Frame of all steel — Timken equipped axle of highest quality steel . . . Martin four-wheel or two-wheel trailers are manufactured in sizes and capacities to suit any truck.

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of this particular district. The minimum allotments are expressed as dollars per day and to reduce this figure to barrels daily requires only the division of the allotment in dollars by the current market price of the crude oil produced. The following table presents minimum allotments for wells of varying depths as determined by the formula given for the particular district which produces 75 cent oil.

Depth Feet	Minimum $/D	Allotment B/D
1000	$ 3.00	4
2000	6.45	8.6
3000	10.45	13.92
4000	15.00	20.00
5000	20.25	27.00
6000	26.30	35.05
7000	33.25	44.30
8000	41.20	54.90
9000	50.40	67.20
10,000	61.00	81.30

Outline of Proposed Procedure

The sliding scale method of proration as here proposed may be best described by summarizing the procedure required for its application as follows:

1. Determine proved acreage of all properties.
2. Determine potential of all properties according to prescribed production practice.
3. Determine number of proved normal locations of each property.
4. Determine development percentage of the field by dividing number of wells by the number of locations.
5. Determine the allotment to be prorated on potential basis by multiplying field development percentage by total field allotment.
6. Determine the allotment to be prorated on adjusted acreage basis by subtracting the allotment for potential from the total field allotment.
7. Determine by the character of field development whether the allotment for adjusted acreage should be prorated according to proved acreage; relative worth or reserve index.
8. Prorate to each producing unit its proportional share of both the allotment for potential and the adjusted acreage allotment and add these two individual allotments together to obtain the total allotment of the producing unit.

If there are marginal wells or properties requiring special consideration, it will be necessary to subtract the total minimum allotment to such units from the field allotment before dividing and prorating the balance.

The individual property allotments thus obtained must be examined for the occasional instances where the allotment of a property might exceed its potential production or where the allotment as given might permit an unbalanced and inequitable production from some group of offset wells.

The sliding scale method of allocating production within the field is of course not so simple as the original methods of proration according to acreage or potential. However, if its use results in a more equitable distribution of the field allotment with due consideration for all important factors, it will mark a distinct improvement over any method that requires the individual consideration of all exceptional situations or special cases. Proration is apparently here to stay for some time and is now out of the experimental stage. Proration procedure therefore, should be improved to the point where every operator is given the most equitable treatment possible under the circumstances. Proration may be considered as a science combining mathematics and economics and as such its problems do not call for blind or haphazard approximation, but rather for study and systematic analysis if the proper method of solution is to be found.

Crude Price Down Seventy-Eight Per Cent

(*Continued from page* 24)

taken as an indication that an effort will be made to make adjustments as needed. Criticism of the potentials as established by the various committees is difficult, in the absence of flow tests. The most conservative engineers and geologists are inclined to place the state potential at a very low figure, with those working with the committees agreeing that the present total upon which the allowables are based is not too high.

The potentials of Santa Fe Springs and Long Beach have been dropped considerably below those carried on May 1. The potential production of Long Beach is now carried at 176,800 barrels, as compared with 193,500 barrels on May 1. Santa Fe Springs' potential on June 1 was placed at 126,600 barrels, as compared with 130,000 barrels on May 1. The drop at Long Beach is a mild admission that the former potential was too high. A potential of 125,000 barrels for Long Beach and 100,000 barrels for Santa Fe Springs is claimed by some, but there is no way to prove their contention. The field declines have been steady, even if at a reduced rate during curtailment, and for this reason the potentials of both Long Beach and Santa Fe Springs must be much lower than they were six months ago.

Ventura Avenue has been given a new potential production of 96,145 barrels, as against 84,675 barrels on May 1. This is one of the steadiest fields in the state, but the potential is considered rather high. Much new oil was added during the past two months.

Elwood is a difficult field to deal with, since the potentials established are largely artificial. On a field test for a short period, there is a possibility that the rated potential produtcion of 86,500 barrels might be reached, but certainly such a large flow could not be maintained with safety for any length of time. Wells in this field are equipped with all sorts of fancy fittings to increase the potential. Gas and air lifts stand ready to make a well do its best. The wells are willing and shallow and the oil virtually rolls out on individual well tests. The potential was dropped from 103,000 barrels as of May 1.

Playa del Rey is given a potential of 42,200 barrels. A rapid survey shows this to be at least 6000 barrels too high. As in the case of other fields,, only an actual flow test would determine the actual potential, however.

Wells on Indian Lands May Shut-In Without Prejudice

Washington.—Acting on a request from E. B. Reeser, president of the American Petroleum Institute, the Interior Department has announced its readiness to cooperate with lessees of Indian oil lands in Oklahoma, owning leases where there is small production who wish to shut down wells temporarily in that territory.

The department indicated that permission would be granted the lessees to shut down for a short period, although if extended shut downs are desired the lessees will have to get the consent of the Indian lessors.

lessees of Indian oil lands in Oklahoma, owning leases where there is small production could close wells temporarily without losing their leases. If lessees desiring to shut down wells make application the department will do all it can to cooperate, according to officials.

CONTROL

MEANS AS MUCH TO A FLOWING WELL AS IT DOES TO A RAILROAD TRAIN

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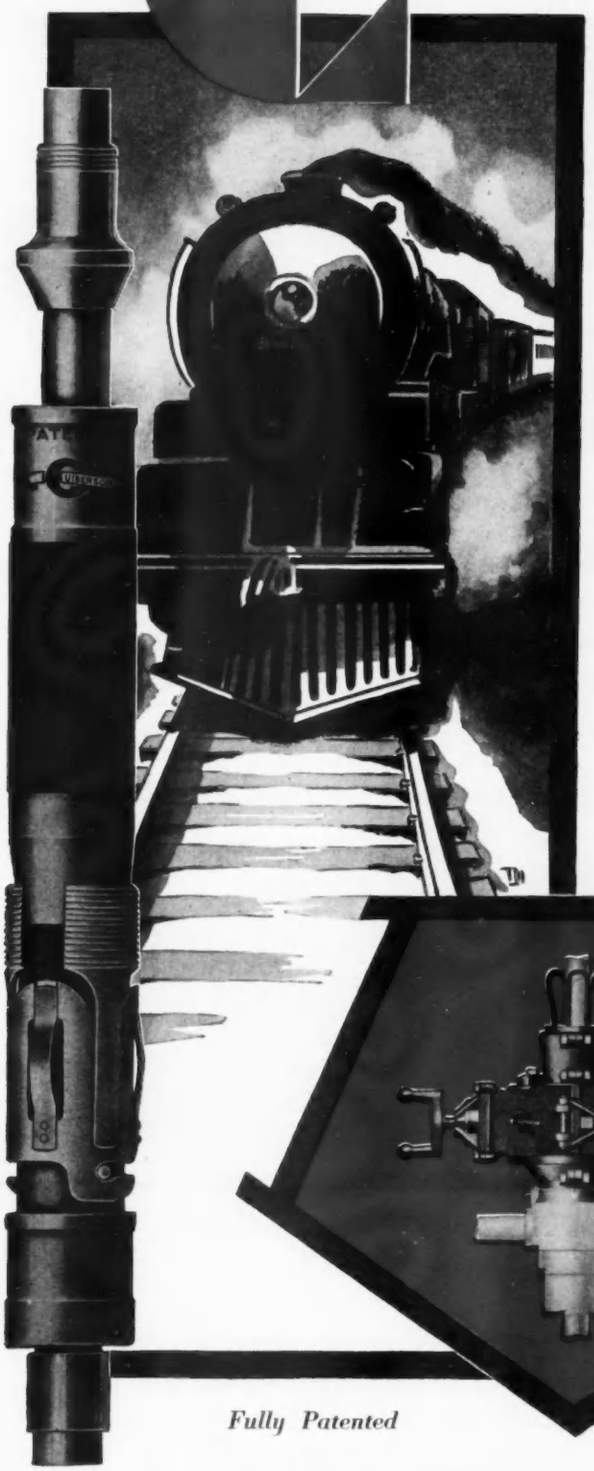
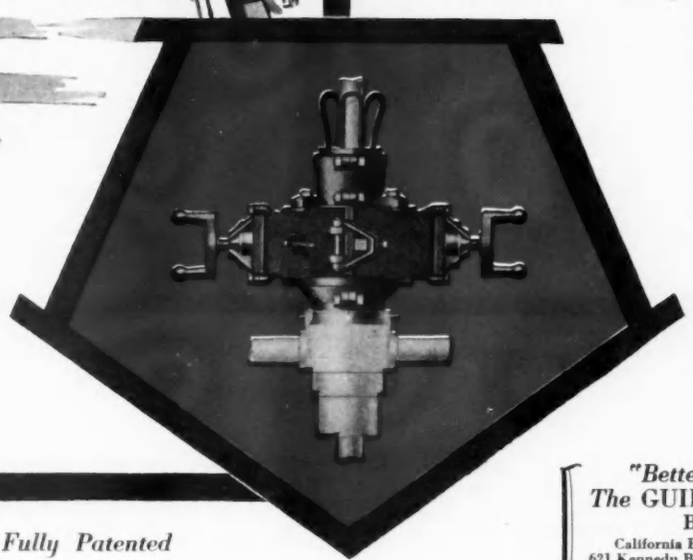
obtain it with the GUIBERSON Control Head Packer





Fully Patented

Movie cartoons notwithstanding, railroad trains will not climb cliffs, leap chasms and do loop-the-loops as if they had never seen a track. Let a railroad train run off its track and—well, you know what happens. A flowing well running haphazardly through the casing is in the same sad predicament.

The Guiberson Control Head Packer confines the flow to the tubing, insuring maximum flow production by conserving the gas pressure and making it lift oil to the full degree. The need for pumping is postponed. Surface pressure is maintained in the well, preserving the gravity of the oil.

The Guiberson Control Head Packer means the difference between efficiency and inefficiency, more than that, between attention and positive neglect. Runs in against heaviest flows.

TO PACK FLOWING WELLS

The Guiberson Tubing Oil Saver, set on top of the casing, confines the flow while the Packer is being run. Rubbers permit passage of tubing collars and it can be opened wide to admit Packer or Tubing Catcher. Designed for safety and economy.

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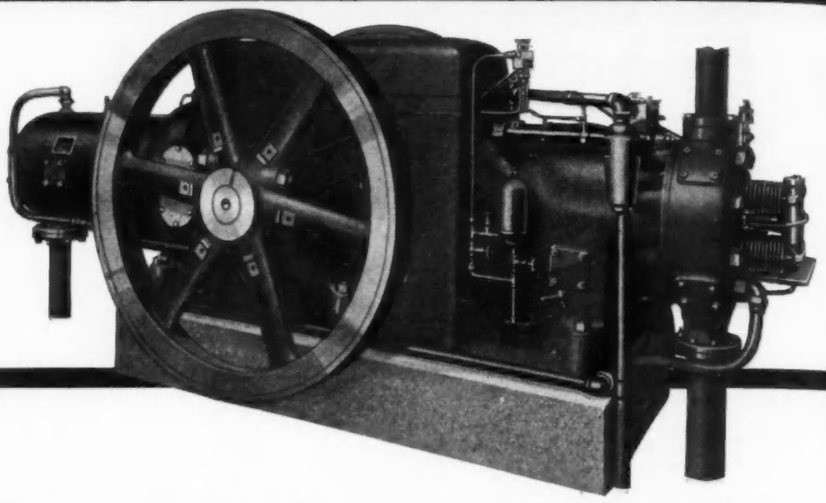
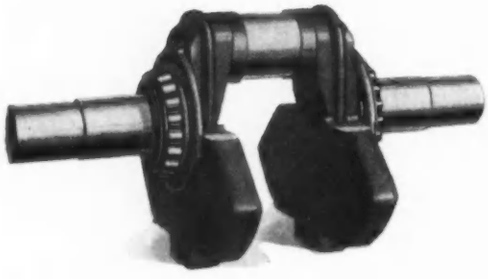
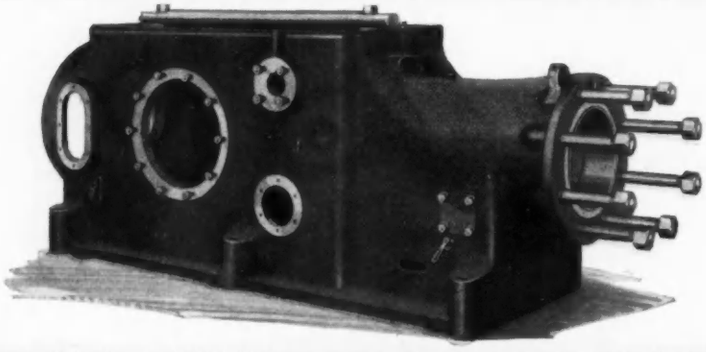
Type-16 is a four cycle direct driven compressor unit. Rated 50 to 60 B. H. P., depending on the speed. Easy to convert for either gas or oil fuel.





Timken main roller bearings. They are 25 to 75% over-strength, (depending upon the type of service), having been developed essentially for use on railway freight cars. Type-16 units are free from main-bearing trouble.

Type-16 has a sturdy main frame. Through the use of circular openings a solid section surrounds the main bearings, assuring freedom from destructive bending action. All reciprocating parts are accessible.



Cross-section of the large-diameter die-forged crankshaft, showing the continuous flow-lines of the metal. No shaft has ever broken.

FOR STRENGTH

TYPE-16

THE experience of users shows that Type-16 really is *Engineered For Strength!* Many of these sturdy engines have been in service for four years, and yet their records are practically clear of trouble of any kind.

To the best of our knowledge, no Type-16 crankshaft has ever failed, and with one exception, no main bearings have ever needed adjustment, (in this one case the bearing was not at fault). This is truly a remarkable record for any engine.

Equipped with certain safety devices, Type-16 gives dependable automatic service. Because of this feature and its operating economies, Type-16's are found in natural gas booster stations; water flowing plants; plants for flowing oil by the flooding process; small electric power plants; manufacturing plants (furnishing power by belt or driving electric generators), and many other services.

A letter to the nearest office listed below will bring a representative or complete descriptive literature.

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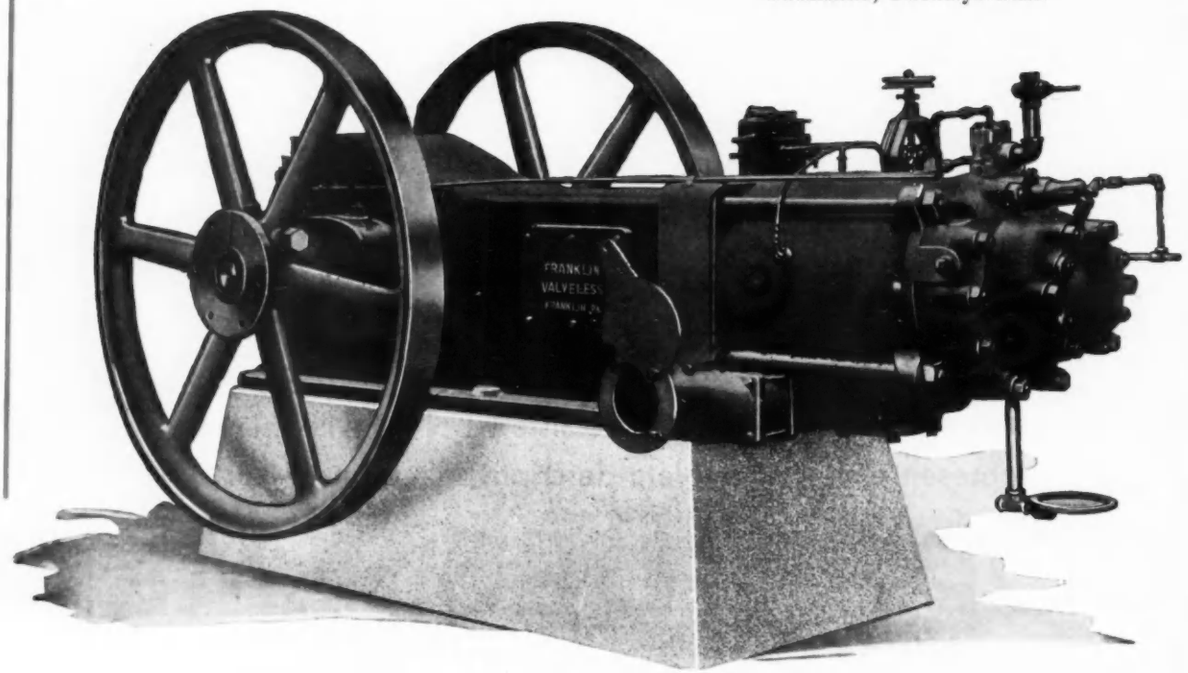
Here's the answer to the power problem you experience when gas isn't available

THE FRANKLIN VALVELESS O. F. OIL ENGINE is an oil engine designed to handle oil field loads—not an industrial oil engine offered to the oil industry. Result: it is the most popular and the most economical of all oil field oil engines. No longer is it necessary for the producer drilling or operating in an area where there is no gas to take his choice of two expensive evils: steam or electric power. The O. F. can and will function as efficiently as either of the above prime movers and it can and does operate, over a long period, much cheaper. Why not get all the facts—before you decide.

Convertible to Gas Fuel in 90 Minutes

FRANKLIN VALVELESS ENGINE COMPANY
Franklin, Pennsylvania



Distributed by **OIL WELL SUPPLY COMPANY**

Markets • Production • Crude Prices

H. J. STRUTH, *Staff Economist, Houston, Texas*

Low Prices Persuading East Texas to Proration

Crumbling of the crude price structure, with the prospect of still lower prices, has apparently brought East Texas operators to their senses; at least to the point where they are beginning to realize the seriousness of the oil situation and the inescapable kick-back upon themselves. The past week witnessed a number of meetings among East Texas operators, meetings that were frought with foment over the disastrous effect of low oil prices. The result of these meetings has been to arouse a great deal more sentiment in favor of proration than at any time since this area became a market menace. Plans have been formulated and agreed upon, which include about all that the railroad commission has ordered. In addition, it was resolved by a majority of interested operators that a demand be made for a fair price for East Texas crude. At a special meeting held in Dallas on June 6, a committee was appointed, representing 30 operators in the East Texas area. Tom Cranfill, of Dallas, heads this committee. At the meeting, it was decided to cut back production in East Texas just as quickly as possible and endeavor to restore a state of economic balance that will justify better oil prices.

Although representative operators of East Texas met—talked—agreed, production in that sector last week continued above 350,000 barrels daily. At the same time, 99 new producing wells were completed there having a rated total initial production of 797,000 barrels of oil. Unless there is an immediate change in the production and development figures of East Texas, it is seen that any and all overtures on the part of the committee to obtain posting of a fair price for East Texas oil will meet with little success. It was learned that the East Texas operators' committee has interviewed heads of major purchasing companies in an effort to show what is expected to be accomplished and to endeavor to have a fair price posted for East Texas oil. The outcome of these interviews was not learned but it is apparent that a better showing will have to be made before definite action is taken by major purchasers. As long as new wells are completed at their present rate and production is maintained at the existing excessive level, there will be dumping of oil at any price and it will be difficult to determine what constitutes a fair market value. The difference between 160,000 barrels and 350,000 barrels represents the gap between normal and sub-normal oil prices in East Texas.

While the daily average production of East Texas only increased 600 barrels last week, there was a gain in United States production of 12,800 barrels. This was due to an increase in output of Oklahoma which amounted to 24,700 barrels. Kansas and California also showed slight gains. Slackened runs of oil from Seminole caused production of that area to show a decline of about 17,000 barrels daily. Increased runs of Oklahoma City oil, however, resulted in a material increase there, which accounted for the gain reported by the state. All other districts outside of Oklahoma, Kansas and California recorded declines in crude production last week. Texas producing districts, outside of East Texas and the Gulf Coast, recorded a decrease in production of about 5400 barrels. Declining prices are attributed to the slump in production of fields outside of East Texas. Gulf Coast production was also down about 1700 barrels. Reduction of New Mexico oil prices to a flat rate of 25 cents a barrel in Lea County, undoubtedly caused operators to withhold production to the extent of an additional 2800 barrels, which represents the decline recorded there last week. The Rocky Mountain area reported a combined decrease in production of 3550 barrels. United States daily average crude production for the past week amounted to 2,474,950 barrels.

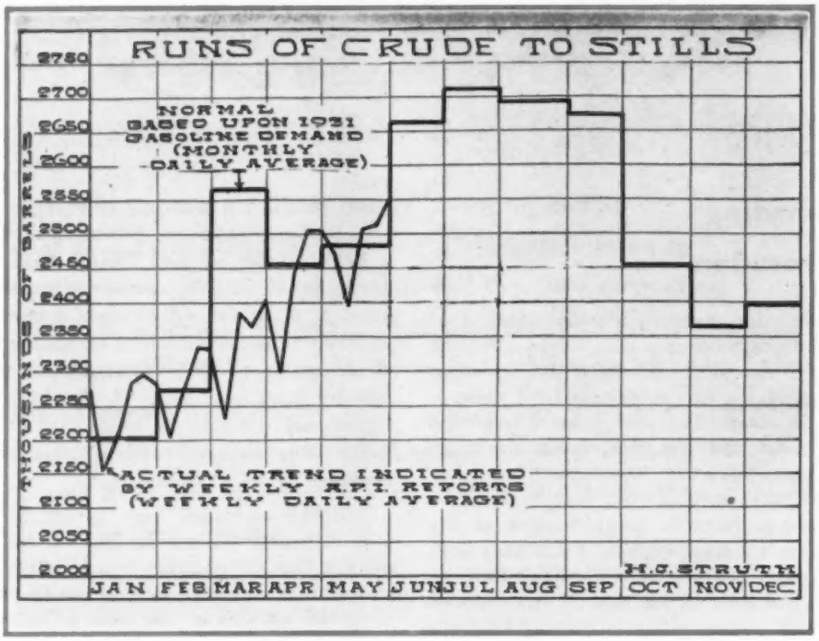
California operators have agreed upon a reduction in the state allowable production limit to 487,500 barrels, and it is believed that the program now in effect will be realized in the near future. Despite the unfavorable market outlook in practically all sections of the United States, California operators are hopeful of realizing better oil prices in the immediate future. Their convictions are undoubtedly justified, since every effort is being made to stabilize the California oil situation. In fact, a report just issued by the California Oil Survey Committee, a body of men not actively associated with the petroleum industry, headed by Mark L. Requa, has been indorsed by most of the major oil companies of that state. The fact that a majority of California operators are willing to accept any constructive plan of operation signifies that they are determined to bring about a degree of control that will result in an improved market structure. It is believed now that California will be the first oil producing state to stage a recovery from the present depression; all because of the practically unanimous accord with which operators there have stuck to the task of getting their house in order.

Refinery Gasoline Stocks Continue Down; Runs Lower

Gasoline stocks at refineries of the United States recorded a further decline last week of 570,000 barrels, according to returns received by the American Petroleum Institute. At this rate of decline, it is estimated that refinery stocks, on a Bureau of Mines basis, now amount to about 45,021,000 barrels. With good motoring weather in prospect during June, it is possible that gasoline stocks will have been reduced to about 42,000,000 barrels by the end of this month. This will constitute a material improvement in the refinery stock situation and will place the industry in a position to stage a recovery in values during July and August. Sentiment in California favors constructive policies in producing and marketing circles and it is believed that the plans now being worked out there will have a favorable influence upon the industry throughout the United States.

Runs of crude to stills were somewhat lower last week, having declined from a daily rate of 2,548,000 barrels in the preceding week to 2,491,000 barrels last week. The record of refinery operations during practically all of the period since

MARKET SECTION



January 1 has given every evidence that refiners are committed to a policy of maintaining a balance between supply and demand. At their present rate, still runs are not considered excessive and a look ahead indicates that even higher rates of throughput will be necessary.

Austin, Texas.—Four more suits have been filed by the Attorney General's office against oil companies in East Texas, asking penalties of $1000 a day for alleged violation of the proration laws of the state. At the same time, another suit has been filed against the railroad commission to restrain it from enforcing proration in East Texas.

Mid-Continent Price Slash Hurts California Prospects

Efforts to raise California crude prices from 35 cents have been met with unfavorable developments both within the state and in the Mid-Continent. East Texas is affecting the West Coast enough to force a continuation of present price schedules. Various agencies have been working for several weeks to bring about higher crude and gasoline prices, in return for promises that the state output will be held to 487,500 barrels. Some distress oil has been reported and this surplus has hindered negotiations.

Crude Runs to Stills, Gasoline Stocks and Gas and Fuel Oil Stocks

Week Ending May 30, 1931

(Figures in barrels of 42 gallons)

District—	Potential Capacity (Daily) Total	Potential Capacity (Daily) Reporting	Per Cent	Crude Runs to Stills Total	Daily Average	Per Cent Operated	Gasoline Stocks (see note below)	Gas & Fuel Oil Stocks
East Coast	612,700	612,700	100.0	3,477,000	496,700	81.1	8,267,000	8,738,000
Appalachian	141,300	132,500	93.8	676,000	96,600	72.9	1,600,000	1,140,000
Indiana, Illinois, Kentucky	390,800	381,000	97.5	2,273,000	324,700	85.2	6,386,000	3,784,000
Oklahoma, Kansas, Missouri	461,100	412,200	89.4	1,932,000	276,000	67.0	3,645,000	4,264,000
Texas	809,000	743,500	91.9	4,028,000	575,400	77.4	7,840,000	9,880,000
Louisiana-Arkansas	266,600	262,000	98.3	1,233,000	176,200	67.3	2,383,000	2,427,000
Rocky Mountain	150,100	139,700	93.1	337,000	48,100	34.4	1,905,000	843,000
California	898,500	887,600	98.8	3,366,000	480,900	54.2	*12,769,000	98,387,000
Total week May 30	3,730,100	3,571,200	95.7	17,322,000	2,474,600	69.3	44,795,000	129,463,000
Total week May 23	3,730,100	3,571,200	95.7	17,092,000	2,441,700	68.4	45,449,000	128,555,000
Total May 31, 1930	3,683,400	3,526,900	95.8	17,964,000	2,566,300	72.8	**52,715,000	**137,593,000
The Texas and Louisiana Gulf Coastal Figures Shown Below are Included Above in the Totals of their Respective districts.								
Texas Gulf Coast	529,500	529,500	100.0	3,069,000	438,400	82.8	6,642,000	6,977,000
Louisiana Gulf Coast	147,500	147,500	100.0	829,000	118,400	80.3	2,226,000	1,491,000

NOTE: In all the refining districts indicated except California, figures in this column represent gasoline stocks at refineries. In *California, they represent the total inventory of finished gasoline and engine distillate held by reporting companies wherever located within continental United States—(stocks at refineries, water terminals and all sales distributing stations, including products in transit thereto).

**Revised due to change in California.

MARKET SECTION

HOW LAST WEEK'S DAILY AVERAGE PRODUCTION COMPARES WITH NECESSARY AND NORMAL QUOTA LIMIT

State—	Indicated Demand Second Quarter 1931	Economic Limit Second Quarter 1931	Daily Average Last week	Daily Excess Last week	Daily Average Since Jan. 1	Daily Excess Since Jan. 1†
Arkansas	58,600	56,000	45,700	—10,300	48,304	—5,696
California	591,500	487,500	529,100	41,600	530,540	34,740
Kansas	118,300	114,000	107,000	—7,000	109,421	—69
Louisiana	78,900	71,000	66,700	—4,300	68,570	—2,430
Oklahoma	551,000	505,000*	552,400	47,400	514,541	29,541
Texas	798,700	767,000*	967,300	200,300	787,244	123,244
Balance of U. S.	254,000	240,000	206,750	—33,250	207,309	—25,191
Total	2,451,000	2,240,500	2,474,950	234,450	2,265,929	154,139

*Allowable.
†Excess based upon average allowable to date.

Crude and gasoline prices have become so interlocked that a change in one will cause a change in the other. The largest purchasers are also large marketers, and they have studied the relation of crude prices to gasoline quotations.

Failure to pay gasoline taxes probably has enabled several large marketers to remain in business. This delinquency has worked a distinct hardship on companies that have paid their taxes promptly. The companies admit the charges and the delinquency can not be called outright evasion. About all the state can do is to sue the various companies. A monthly settlement law is now in effect and accounts must be settled oftener.

State production remains about the same. The plan which calls for a production of 487,500 barrels daily is really in effect, but limited headway has been made. Claims are made that a reduction is imperative, with fields already near their former allowables to stand an additional cut of 10 or 15 per cent.

Export gasoline and crude prices have declined gradually

Cracked Gasoline Production

Week Ending May 30, 1931
(Barrels of 42 gallons)

District	Potential Total	Charging Reporting	Capacity Per Cent	Production Total	Production Daily Average
East Coast	246,900	222,900	90.3	610,000	87,200
Appalachian	45,900	39,100	85.2	150,000	21,400
Ind., Ill., Ky.	294,200	280,200	95.2	593,000	84,700
Okla., Kans., Mo.	219,900	194,900	88.6	417,000	59,600
Texas	395,500	379,400	95.9	865,000	123,600
Louisiana-Arkansas	109,400	106,900	97.7	230,000	32,900
Rocky Mountain	95,100	95,100	100.0	108,000	15,400
California	182,700	182,700	100.0	260,000	37,100
Total week May 30	1,589,600	1,501,200	94.4	3,233,000	461,900
Total week May 23	1,589,600	1,508,500	94.9	3,335,000	476,400
Total May 31, 1930			Not Available		

The Texas and Louisiana Gulf Coastal Figures Shown Below are included above in the totals of their respective districts.

Texas Gulf Coast	305,000	300,500	98.5	701,000	100,100
Louisiana G. Coast	77,000	77,000	100.0	170,000	24,300

Imports of Petroleum

(Barrels of 42 gallons)

	Week Ended May 30		Week Ended May 23
AT ATLANTIC COAST PORTS—			
Baltimore	195,000		194,000
Boston	103,000		.....
New York	878,000		728,000
Philadelphia	308,000		165,000
Others	182,000	"A"	310,000
Total	1,666,000		1,397,000
Daily Average	238,000		199,571
AT GULF COAST PORTS—			
Galveston District	.....		.....
New Orleans and Baton Rouge	62,000		.....
Port Arthur and Sabine District	.....		.....
Tampa	.....		.....
Total	62,000		.....
Daily Average	8,857		.....
AT ALL UNITED STATES PORTS—			
Total	1,728,000		1,397,000
Daily Average	246,857		199,571
Daily Average Four Weeks Ended	209,250		211,286
Distribution of Total Imports Is As Follows:			
Crude	1,146,000		729,000
Gasoline	300,000	"A"	328,000
Fuel Oil	282,000		340,000
Total	1,728,000		1,397,000

"A"—Revised.

California Oil Receipts

(Barrels of 42 gallons)

	Week Ended May 30	Week Ended May 23
AT ATLANTIC COAST PORTS—		
Baltimore	25,000	.....
Boston	.....	.....
New York	117,000	287,000
Philadelphia	.....	114,000
Others	.....	.....
Total	142,000	401,000
Daily Average	20,286	57,286
AT GULF COAST PORTS—		
Total	.....	.....
Daily Average	.....	.....
AT ATLANTIC AND GULF COAST PORTS—		
Total	142,000	401,000
Daily Average	20,286	57,286
Daily Average Four Weeks Ended	46,500	55,393
Distribution of Total California Oil Receipts Is As Follows:		
AT ATLANTIC COAST PORTS—		
Gasoline	142,000	306,000
Fuel Oil	.....	95,000
Total	142,000	401,000

MARKET SECTION

United States Daily Average Production

1930	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Daily Av.	United States Total
April	657,050	122,200	640,950	206,800	42,100	57,800	138,700	75,950	625,700	2,576,250	77,018,100
May	663,300	131,000	662,350	203,900	39,900	53,800	137,150	82,500	623,700	2,597,700	80,529,600
June	665,550	133,600	668,300	210,500	40,300	56,900	135,750	84,600	598,000	2,593,500	77,806,900
July	594,750	121,600	652,350	209,400	40,550	55,400	137,200	98,350	610,450	2,520,050	78,121,200
August	558,850	115,650	646,400	206,600	41,500	55,100	128,550	106,000	611,250	2,470,900	76,597,600
September	558,900	116,550	606,550	200,750	40,150	53,550	121,400	110,650	604,900	2,413,400	72,402,205
October	542,100	114,850	609,500	194,850	41,500	52,800	121,750	104,000	590,800	2,372,150	73,536,350
November	491,550	111,400	579,350	190,100	44,050	52,000	116,400	101,950	601,200	2,288,000	68,639,150
December	459,300	105,550	533,400	189,300	43,000	51,100	112,200	100,500	587,450	2,181,800	67,636,500
1931											
January	452,000	106,350	511,050	188,850	41,100	50,700	110,300	96,700	535,700	2,092,750	64,874,450
February	473,750	114,450	523,700	185,600	43,950	49,950	109,800	100,100	527,300	2,128,600	59,600,450
March	531,900	110,550	585,000	177,950	40,250	47,550	108,800	95,400	528,100	2,225,500	68,990,850
April	543,650	109,250	723,050	185,850	39,050	47,000	111,500	95,500	527,350	3,382,200	71,465,750
May*	561,100	107,400	767,350	186,000	39,250	46,650	111,300	97,600	534,150	2,450,800	75,975,950
May 30	527,700	106,800	822,350	180,400	38,600	46,250	111,000	100,650	528,400	2,462,150	17,235,050
June 6	552,400	107,000	817,550	178,700	37,750	45,700	109,650	97,100	529,100	2,474,950	17,324,650
Increase	24,700	200	.....	.....	.....	.....	.....	.....	700	12,800	89,600
Decrease	.....	.....	4,800	1,700	850	550	1,350	3,550	.....	.....	.....

*Preliminary—Subject to revision.

Last Week's Daily Average Production by Districts

TEXAS	June 6	May 30
Panhandle District	59,900	61,800
North Texas	55,750	56,500
West Central Texas	25,850	26,400
West Texas	209,000	210,600
East Central Texas	56,750	55,600
East Texas	351,500	350,900
Southwest Texas	58,800	60,550
Texas Gulf Coast	149,750	150,500
Total Texas	967,300	972,850
OKLAHOMA	552,400	527,700
CALIFORNIA	529,100	528,400
KANSAS	107,000	106,800

LOUISIANA	June 6	May 30
North Louisiana	37,750	38,600
Louisiana Gulf Coast	28,950	29,900
Total Louisiana	66,700	68,500
ARKANSAS	45,700	46,250
MOUNTAIN STATES		
Wyoming	42,050	42,250
Montana	8,100	8,650
Colorado	4,050	4,050
New Mexico	42,900	45,700
Total Mountain States	97,100	100,650
EASTERN STATES	109,650	111,000
TOTAL UNITED STATES	2,474,950	2,462,150

Summarized Review of Field Results

State—	Completions This week	Completions Last week	Oil Wells This week	Oil Wells Last week	Gas Wells This week	Gas Wells Last week	Failures This week	Failures Last week	Initial Prod. This week	Initial Prod. Last week
Arkansas	2	4	1	1	..	..	1	3	170	268
California	6	8	4	7	..	..	2	1	17,700	17,210
Illinois	2	..	..	..	..	..	2	..	.....	.....
Indiana	2	4	2	1	..	..	..	3	375	50
Kansas	12	5	5	2	4	2	3	1	9,660	4,055
Kentucky	9	4	4	1	3	1	2	2	310	35
Louisiana	8	7	4	..	2	1	2	6	360	.....
Michigan	1	2	..	..	1	..	..	2	.....	.....
Mississippi	1	1	..	..	1	1	..	..	.....	.....
New York	3	22	2	..	..	22	1	..	10	.....
Ohio	22	24	3	4	13	16	6	4	91	90
Oklahoma	20	13	9	3	6	6	5	4	42,685	5,245
Pennsylvania	8	4	6	..	2	3	..	1	20	.....
Texas	160	142	124	122	3	3	33	17	797,118	800,113
West Virginia	19	6	2	1	16	5	1	..	5	25
Total	275	246	166	142	51	60	58	44	868,504	827,091
Increase this week	29	..	24	..	..	..	14	..	41,413	.....
Decrease this week	..	..	..	..	9	..	..	..	.....	.....

Comparison of Permits Granted for New Wells

State—	Week Ending June 6	Previous week	This week 1930	Total this month	This month 1930	Total this year	Total this date last year	1930 year total
Arkansas	..	..	1	..	1	23	50	108
California	11	30	19	11	19	206	349	922
Louisiana	4	12	26	4	26	162	498	948
Kansas	11	11	22	11	22	221	481	944
Oklahoma	18	14	79	18	79	475	1,466	2,830
Texas	*147	201	207	147	207	2,580	3,622	7,052
Total	191	268	354	191	354	3,667	6,466	12,804

*—Rusk and Gregg Counties—109.

MARKET SECTION

since the domestic quotations were posted. Gasoline is netting back as little as 3½ cents, but the average may be somewhat higher. Foreign buyers of crude oil are profiting by the lower posted field prices. Panama Canal shipments of gasoline have declined sharply.

California finds itself more dependent upon Mid-Continent and world conditions than before and an improvement will have to be recorded elsewhere before the industry on the West Coast can start a steady climb upward.

Price Situation Forcing Well Abandonment in Oklahoma

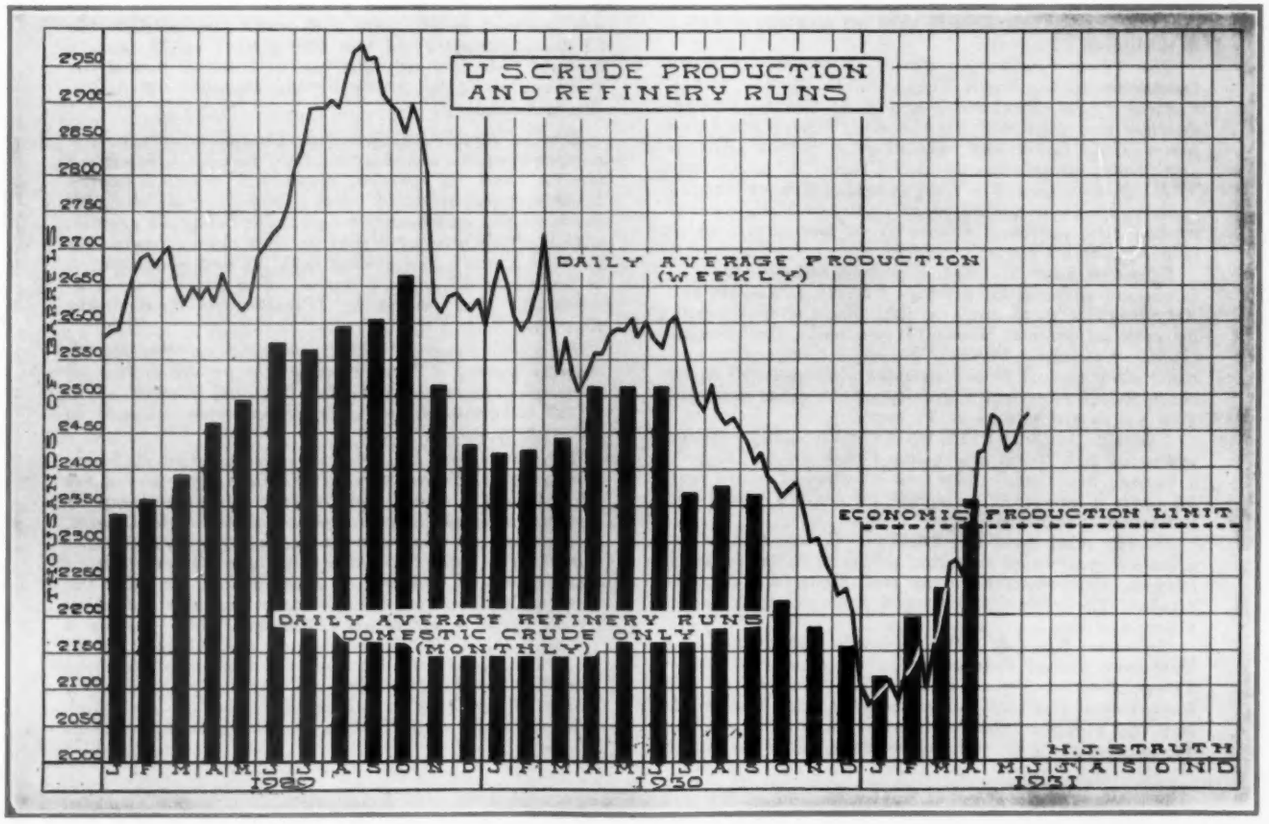
Abandonment of pumping wells in the older fields of Oklahoma is the immediate prospect following the last reduction of crude oil prices. Governmental recognition of the position of pumping wells came this week when the Department of the Interior at Washington granted permission to superintendents of Indian agencies in Oklahoma to allow small wells to be shut down temporarily. This permission is only for shutting down wells on leases of Indian land owners and does not involve abandonment. But the fact that holders of working interests on Indian lands have asked for permission to halt pumping is evidence of what will happen to the stripper wells on leases not under governmental control. Superintendents of Indian agencies were told they could, on the application of the well owner, permit closing in of small wells, which would not be damaged by a period of inactivity. Authority was restricted to only a few months of inactivity.

Refining plants in Kansas, Oklahoma and Texas outside the Gulf Coast have increased runs by 50,000 barrels daily as of June 1 compared with May 1. This increase is in part accounted for by the starting of plants in East Texas. Elsewhere in the Mid-Continent refiners have shown a disposition to increase runs following the last cut in crude oil prices.

So far Mid-Continent refiners have not reduced gasoline prices to correspond to the crude oil reduction. Some gasoline was quoted this week at 2¼ cents but many concerns declined to quote any lower than the prices prevailing before the crude cut was announced. This is the first time that refiners have upheld their gasoline market in the face of lowered crude prices and is interpreted as evidence that the refined oil market is on bottom.

North Louisiana Fields Hard Hit by Low Prices

Shreveport.—The light oil producing fields of North Louisiana were especially hard hit by the reductions in the price of crude oil announced by all purchasing companies in this territory during the past week. With top prices of 37 cents per barrel for 40 gravity and above, the net price in Louisiana light districts producing this quality of crude is but 26 cents due to the severance tax in this state which is based on a gravity basis and is 11 cents for oil of 40 gravity and above. Light Caddo, Zwolle, and Cartersville, with a combined daily yield of about 16,000 barrels, are the districts most vitally affected.



MARKET SECTION

Way Made Clear for Socony-Vacuum Merger

Washington, D. C.—Conclusion of the Department of Justice that the contemplated merger of Standard Oil Company of New York and Vacuum Oil Company involved no violation of the Supreme Court's Standard Oil Dissolution decree of 1911, opens the way to completion of the union of these two companies. Last year, the merger was proposed with the idea of consolidating these two companies under the name of the General Petroleum Corporation, which would have all assets of Standard Oil Company of New York and acquire all assets of Vacuum Oil Company. Since this merger agreement, however, the ratio of stock market values of one company to the other has undergone considerable change. In fact, it is believed that the original basis of exchange would not be approved now by stockholders of Standard Oil Company of New York. It is believed, however, that new terms of exchange will be worked out in the near future and will perhaps result in the ultimate merging of these two organizations.

Another merger prospect which came to light a few days ago is that of Standard Oil Company of New Jersey with Standard Oil Company of California. Previously, the Department of Justice was queried as to this merger and it was stated that such a combination would probably be forbidden by the 1911 dissolution decree. In view of the clear bill of health handed out in connection with the Socony-Vacuum merger, however, there is a possibility also that integration of other Standard Oil units will be allowed.

Kansas City, Mo.—General offices of Continental Construction Corporation and Texoma Natural Gas Company will be removed to Chicago, June 25, according to announcement sent out by the company. The new offices of both organizations will be in the Civic Opera Building, 20 N. Wacker Drive, Chicago.

CRUDE PRICE CHANGES

Effective June 1, 1931, Stanolind Crude Oil Purchasing Company reduced Mid-Continent crude below 29 gravity 25 cents a barrel; 29 gravity 26 cents a barrel, with one-cent differential on each degree to 40 and above which is posted at 37 cents a barrel.

Effective June 2, 1931, Magnolia Petroleum Company posted reduction equivalent to Stanolind Crude Oil Purchasing Company's scale of prices on all grades of Mid-Continent crude, except East Texas and Panhandle Texas. Magnolia scale begins with 26 gravity which is posted at 22 cents a barrel, with differential of one cent for each degree beginning with 26 gravity and ending with 40 and above which is posted at 37 cents.

The Texas Company reduced all grades of North Louisiana crude, North Texas, North Central Texas, Central Texas, Panhandle and Gulf Coast. The reduction was also met by the Gulf Pipe Line Company. Gulf Coast was placed on a gravity scale as one grade, eliminating former Grade "A" and Grade "B." New prices for Gulf Coast oil begin at 25 gravity, which is posted at 44 cents, with differential of one cent for each degree to 40 and above which is posted at 60 cents.

Effective June 3, 1931, Standard Oil Company of Louisiana reduced all grades of North Louisiana and Arkansas crude, to conform with Mid-Continent gravity scale of prices. Homer, Haynesville, Bull Bayou, Caddo, Crichton, DeSoto, Sarepta, Carterville, Cotton Valley and El Dorado crudes were reduced thirty cents making below 29 gravity oil 25 cents a barrel. Top prices are posted at 37 cents.

Effective June 2, 1931, Ohio Oil Company reduced prices of Elk Basin and Grass Creek crude 28 cents a barrel; big Muddy 25 cents a barrel; Lance Creek 23 cents a barrel; Rock Creek 21 cents a barrel and Sunburst 25 cents a barrel.

On the same date The Ohio Oil Company also announced reductions in posted prices of Lima, Indiana, Illinois, Princeton, Wooster and Western Kentucky crudes. The reductions ranged from 25 to 29 cents a barrel.

Effective June 3, 1931, Humble Oil & Refining Company posted reductions on all grades of North Texas, Central Texas, Panhandle, West Texas and Gulf Coast crudes. Announcement was also made that this company had withdrawn its posting on East Texas crude. The reductions conformed to prices previously posted for Mid-Continent crude, while flat prices for West Texas and New Mexico were cut to 25 cents a barrel. Humble Oil & Refining Company's posting on Gulf Coast crude also eliminated the "A" and "B" grades, posting 44 cents for oil of below 25 gravity with a differential of 1 cent on each degree beginning with 25 gravity and ending with 35 and above which is posted at 55 cents a barrel.

Effective June 3, 1931, Magnolia Petroleum Company posted reductions conforming to the Mid-Continent gravity scale on all grades of crude purchased in North Louisiana and Arkansas. Smackover crude was reduced to 25 cents and crude produced in the El Dorado East Field was also posted at 25 cents a barrel. This company also met reductions posted for Panhandle, Texas, crude by the Humble Oil & Refining Company.

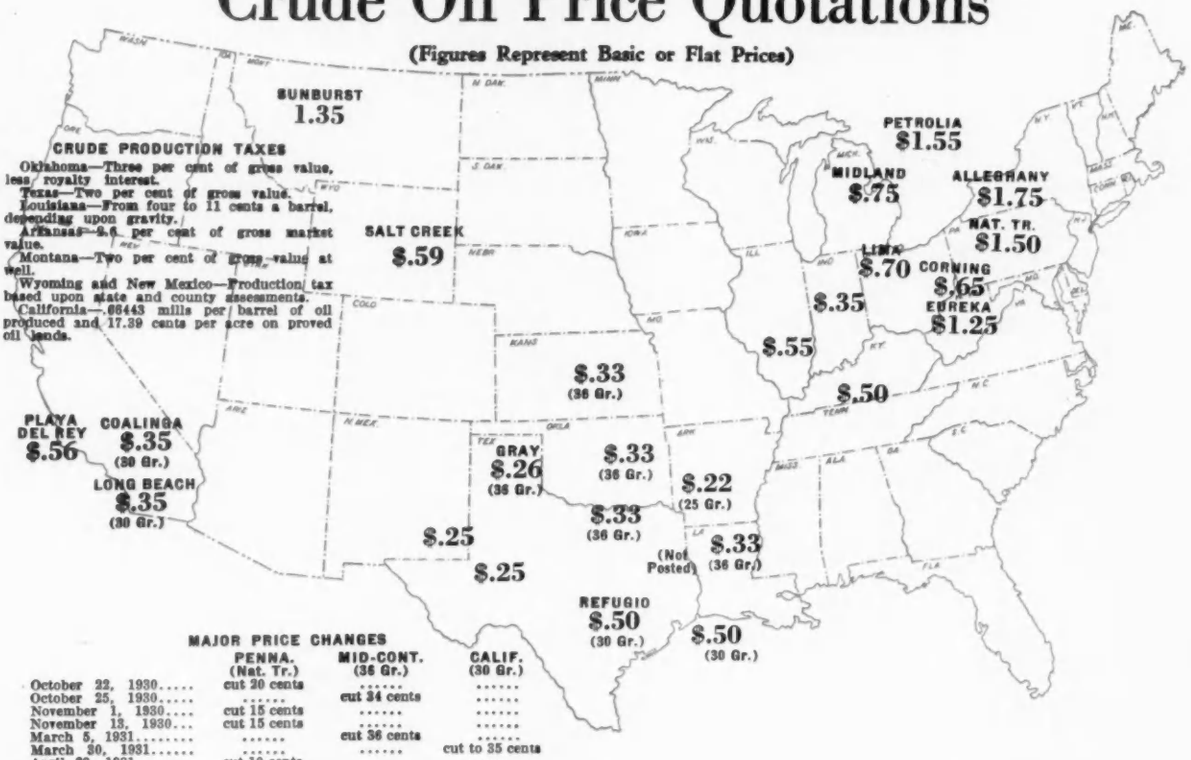
On the same date, Sun Pipe Line Company posted a separate price schedule on Gulf Coast oil, retaining the "A" and "B" grades. Grade "A" crude is posted by this company at 44 cents a barrel, while the "B" grade begins at 44 cents a barrel for below 25 gravity, with a differential of 1 cent on each degree beginning with 25 gravity and ending with 35 and above which is posted at 55 cents a barrel. The price scale conforms to that posted by Humble Oil & Refining Company.

Effective June 3, 1931, Joseph Seep Purchasing Agency posted a 25-cent reduction on all grades of Pennsylvania crude, reducing National Transit oil to $1.50 a barrel. Corning crude was also reduced to 65 cents a barrel.

Effective June 4, 1931, Louisiana Oil Refining Corporation, Cities Service Oil Company and Atlas Pipe Line Company met Standard Oil Company of Louisiana schedule on North Louisiana crude. Urania, Louisiana, oil was reduced from 20 to 30 cents a barrel. The Atlas Pipe Line Company also announced withdrawal of posting on East Texas oil. On the same date, Imperial Oil Company posted a reduction of 20 cents a barrel on Canadian crude, posting a price of $1.55 on Petrolia crude and $1.62 a barrel on Oil Springs oil. Vacuum Oil Company also met the Humble Oil & Refining Company scale on Gulf Coast oil, posting a minimum price on Lockport, Louisiana, oil of 44 cents a barrel and a top price of 55 cents.

Crude Oil Price Quotations

(Figures Represent Basic or Flat Prices)



MAJOR PRICE CHANGES

	PENNA. (Nat. Tr.)	MID-CONT. (36 Gr.)	CALIF. (30 Gr.)
October 22, 1930.....	cut 20 cents	.....	.....
October 25, 1930.....	.....	cut 34 cents	.....
November 1, 1930....	cut 15 cents	.....	.....
November 13, 1930...	cut 15 cents	.....	.....
March 5, 1931.....	.....	cut 36 cents	.....
March 30, 1931.....	.....	.....	cut to 35 cents
April 23, 1931.....	cut 10 cents	.....	.....
June 1, 1931.....	.....	cut 30 cents	.....
June 3, 1931.....	cut 25 cents	.....	.....

Official Postings and Differentials

(Revised to June 9, 1931)

California: (Prices effective March 30).

In all **Los Angeles Basin** fields (except Playa del Rey) oil from 14 gravity to 20.9 gravity is 65 cents. Deduct 3 cents from each degree up the scale to 30.9, making this the lowest at 35 cents. Fields in this group include **Alamitos Heights, Long Beach, Seal Beach, Torrance, Athens, Rosecrans, Dominguez, Santa Fe Springs, Montebello, Huntington Beach, East Coyote, Richfield and Brea-Olinda.**

Playa Del Rey: 56 cents flat, 20-26 gr.

In the **San Joaquin Valley** fields, 11 to 11.9 gravity crude is 50 cents per barrel, 14 to 14.9 gravity, 55 cents. Differential of 2 cents off each degree up the scale makes 30 gravity and above 35 cents per barrel. Fields in this group include **Coalinga, McKittrick, Kern River, Sunset-Midway, Elk Hills, Buena Vista Hills and Lost Hills.**

Santa Paula 14 to 19.9 gravity, 60 cents; 20 gravity, 58 cents; 21 gravity, 56 cents, and take off 3 cents for each degree up to and including 28 gravity. **Orcutt** 14 to 19.9 gravity, 55 cents, and take off 2 cents for each degree up to and including 29 gravity which is 35 cents.

Oklahoma-Kansas-North Texas: (Effective June 2, 1931). Below 29 gravity 25 cents with differential of 1 cent to 40 and above. Magnolia Petroleum Company posts 22 cents for below 26 gravity with differential of 1 cent to 40 and above. North Texas posting applies to oil produced in **Wichita, Wilbarger, Archer, Northern Young, Van Zandt, Mexia, Powell, Boggy Creek, Richland, Wortham, Currie.**

Ranger, North Texas, Moran and Cook County oil: (Effective June 3, 1931). Below 29 gravity, 25 cents a barrel, with differential of 1 cent for each degree beginning with 29 gravity and ending with 40 and above which is posted at 37 cents a barrel.

Texas Panhandle: (Effective June 3, 1931). Gray County: below 35 gravity 24 cents a barrel, with differential of 1 cent for each degree beginning with 35 gravity and ending with 40 and above which is posted at 30 cents a barrel.

Carson and Hutchinson Counties: (Effective June 3, 1931). Below 35 gravity 21 cents a barrel, with 1 cent differential beginning with 35 gravity and ending with 40 and above which is posted at 27 cents a barrel.

East Eexas: (Effective June 3, 1931). Postings withdrawn by all major purchasing companies. Oil being marketed at various prices below Mid-Continent scale.

West Texas and New Mexico: (Effective June 3, 1931). **Winkler and Pecos County, Texas:** Flat price of 25 cents a barrel. **Lea County, New Mexico:** Flat price of 25 cents a barrel. **Crane, Upton, Crockett, Ector, Howard and Glasscock Counties:** Flat price of 25 cents a barrel.

Southwest Texas: (Effective June 3, 1931). **Refugio Heavy:** Below 25 gravity—44 cents a barrel. **Refugio Light:** 25-25.9 gravity 45 cents a barrel with differential of 1 cent for each degree to 35 and above which is posted at 55 cents a barrel.

Mirando, 44 cents; **Salt Flat,** 37 cents; **Darst Creek,** 37 cents; **Pettus,** 50 cents.

Gulf Coast: (Effective June 3, 1931). **Grade "A"**—posting eliminated. **Geese Creek, Hull, Liberty, Orange, Pierce Junction, Mykawa, Moss Bluff, Racoon Bend, Barbers Hill, Sour Lake, Spindletop, Sugarland, West Columbia and Humble:** Below 25 gravity 44 cents a barrel with differential of 1 cent for each degree beginning with 25 gravity and ending with 35 and above which is posted at 55 cents a barrel.

Markham crude: 37 cents a barrel

North Louisiana and Arkansas: (Effective June 3, 1931). **Caddo, Homer, Haynesville, Bull Bayou, Sabine, Crichton, De Soto, El-Dorado, Cotton Valley, Sarepta, Carterville:** Below 29 gravity, 25 cents a barrel, with differential of 1 cent for each degree beginning with 29 gravity and ending with 40 and above which is posted at 37 cents a barrel.

Smackover and Bellevue: 25 cents flat. **El Dorado East Field:** 25 cents.

Rocky Mountain States: (Effective June 2, 1931).

Salt Creek: 29-29.9 gravity 45 cents with differential of 2 cents for each degree to 37 and above which is posted at 61 cents a barrel. (Price unchanged since March 10, 1931).

Elk Basin and Grass Creek—62 cents a barrel. **Big Muddy**—40 cents a barrel. **Lance Creek**—75 cents a barrel **Rock Creek**—45 cents a barrel. **Sunburst**—$1.25 a barrel. **Mule Creek**—$1.20 a barrel. **Rex Lake**—$1.10 a barrel. **Osage**—50 cents a barrel. **Cat Creek**—$1.25 a barrel. **Pondera**—$1.45 a barrel. **Hogback, N. M.**—1.40 a barrel.

Eastern States: (Effective June 2, 1931). **Lima**—70 cents; **Indiana**—35 cents; **Illinois**—55 cents; **Princeton** 55 cents; **Wooster**—73 cents—**Western Kentucky**—50 cents.

Pennsylvania: (Effective June 3, 1931). Bradford district—$1.75; **National Transit oil**—$1.50; **Southwest Pennsylvania Pipe Line oil**—$1.35; **Eureka Pipe Line oil**—$1.25; **Buckeye Pipe Line oil**—$1.00; **Corning crude** 65 cents.

Michigan—

Midland (Effective March 13, 1931)—75 cents a barrel.

Muskegon (Posting follows Mid-Continent gravity scale).

Canada: (Effective June 4, 1931).

Petrolia—$1.55; **Oil Springs**—$1.62.

Summary of Field Operations, May, 1931

▼ ▼ ▼

Recapitulation—United States

State—	Completions May	Total Completions Jan.-May	Producers May	Total Producers Jan.-May	Gas Wells May	Total Gas Wells Jan.-May	Failures May	Total Failures Jan.-May	Initial Production Oil May	Initial Production Total Oil Jan.-May	Initial Production Gas* May	Initial Production Total Gas Jan.-May	Total Production May	Total Production Jan.-May
Oklahoma	102	600	30	294	23	95	49	211	101,120	1,193,270	217	986	17,396,500	77,540,250
Kansas	39	197	18	88	10	50	11	59	28,215	65,985	122	629¾	3,329,250	16,549,150
Texas (outside Gulf Coast)	591	1,837	435	1,088	33	121	123	628	2,855,624	5,291,231	484¼	2,532¾	23,787,650	93,839,000
Gulf Coast	57	356	27	186	...	7	30	163	26,765	113,830	...	185½	5,766,050	27,901,750
North Louisiana	28	141	6	29	10	42	12	70	2,358	14,240	267¼	968½	1,216,400	6,140,550
Arkansas	16	55	7	26	..	8	9	21	1,265	2,451	...	65½	1,446,150	7,298,400
Eastern States	227	1,397	38	400	136	608	53	389	1,967	18,929	330	1,226	3,450,800	16,657,100
New Mexico	..	20	..	13	..	1	..	6	.....	45,263	...	35¾	(a)	(a)
Rocky Mountains	b	b	b	b	b	b	b	b	(b)	(b)	(b)	(b)	3,025,950	14,625,600
California	35	187	33	163	..	..	2	24	58,070	149,595	...	...	16,557,200	80,143,400
Total	1,095	4,790	594	2,287	212	932	289	1,571	3,075,384	6,894,794	7,420½	6,629¾	75,975,950	340,695,200

*Millions of cubic feet.
(a) Included in Rocky Mountain estimates.
(b) Not available.

Record-Breaking New Production in May

New oil production, as a result of continued feverish development of East Texas, broke all records during May. The combined initial oil production for that month rose to a new high level of 3,075,384 barrels daily, compared with 1,857,297 barrels in April; 704,926 barrels in March and 459,727 barrels in February. Well completions during May amounted to 1095, against 905 in April. The completion of 594 producing oil wells in the United States, yielding so large a rate of new production indicates an initial output per well of 5177 barrels daily. In fact, the rate of new production per well in East Texas rose from an average of 6600 barrels to 8000 barrels per well during May.

Texas led all producing states in total crude production in May with 23,787,650 barrels, followed by Oklahoma with 17,396,500 barrels and California with 16,557,200 barrels. Total crude production of the United States for May amounted to 75,975,950 barrels, an increase over April of 4,764,200 barrels. The rise in production of Texas is emphasized by the table showing the result of operations for the first five months of this year in East Texas. Preliminary figures indicate that the daily average production of Texas, outside of Gulf Coast amounted to 767,350 barrels during May, an increase of 44,000 barrels a day over April. Daily average production of the United States increased from 2,328,200 barrels in April to 2,450,800 barrels in May.

Past Twelve Months

The record for the past 12 months is an interesting study for comparative purposes, the following table giving the field statistics for all states:

Month—	Completions	Producers	Gas wells	Failures	Initial Prod.
January, 1930	1,918	1,142	296	480	685,325
February	1,463	881	201	381	990,869
March	1,544	794	220	530	665,535
April	1,702	1,023	180	499	776,024
May	1,973	1,125	228	611	771,977
June	1,679	950	223	506	580,997
July	2,144	1,167	306	671	845,068
August	1,837	930	310	597	1,160,055
September	1,165	619	208	338	833,109
October	1,199	587	245	367	615,002
November	1,253	644	217	392	901,046
December	1,479	650	310	519	979,111
January, 1931	1,156	519	211	426	796,860
February	815	348	192	275	459,727
March	819	347	153	319	704,526
April	905	479	164	262	1,858,297
May	1,095	594	212	289	3,075,384

*Rocky Mountain data not available.

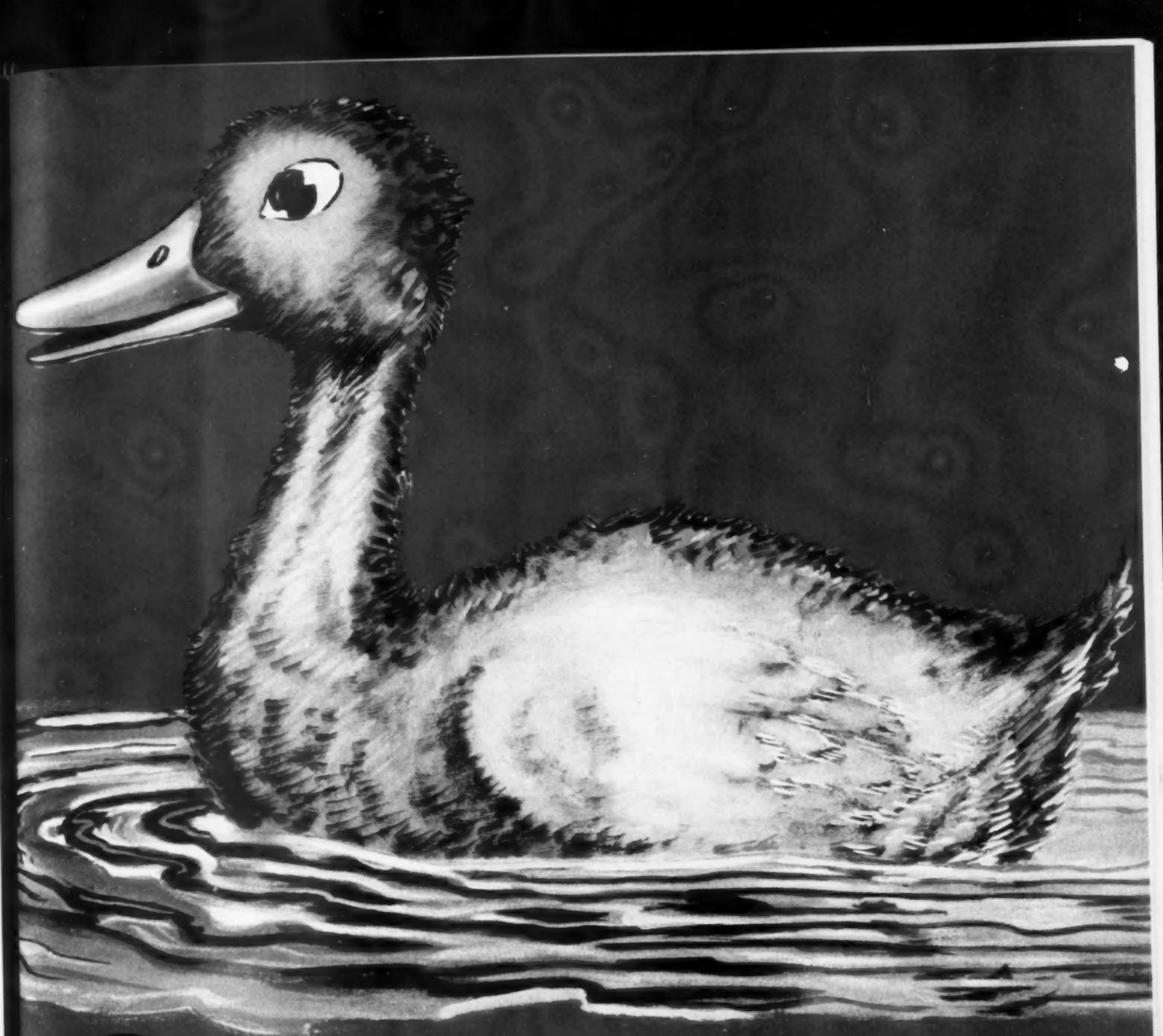
EAST TEXAS COMPLETIONS AND PRODUCTION

County or Field	Total Completion Jan.-May	Total Initial Production Jan.-May	Total Production Jan.-May
Gregg	32	256,500	.....
Joiner-Bradford	149	705,385	7,125,400
Kilgore	228	2,118,000	9,421,850
Longview	83	821,800	3,486,350
Rusk	87	965,030	.....
Total	579	4,866,715	20,033,600

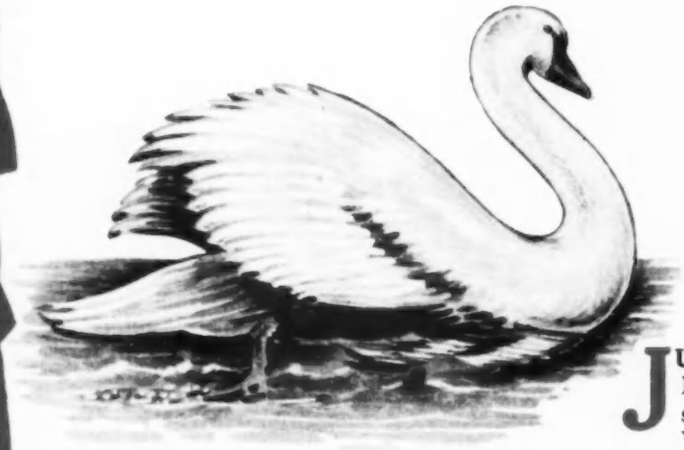
United States Production

State—	Total Production May*	Daily Average May*	Daily Average April
Oklahoma	17,396,500	561,100	543,650
Kansas	3,329,250	107,400	109,250
Texas (outside Gulf Coast)	23,787,650	767,350	723,050
Gulf Coast	5,766,050	186,000	185,850
North Louisiana	1,216,400	39,250	39,050
Arkansas	1,446,150	46,650	47,000
Eastern States	3,450,800	111,300	111,500
Rocky Mountains	3,025,950	97,600	95,500
California	16,557,200	534,150	527,350
Total	75,975,950	2,450,800	2,382,200

*Preliminary—subject to revision.



The Ugly Duckling!



A Swan of Service!

JUST AS THE UGLY DUCKLING TURNED INTO A BEAUTIFUL SWAN, in the Fairy Book, so does the B. S. & B. Thief Hole Pressure Vacuum Valve prove to be a swan of service in reality. Though this safety valve is rugged in design, it is a thing of beauty in the service that it renders. This valve operates at 16 ounces pressure or 2 ounces vacuum. By this valve your tank is protected from bulging or collapsing due to excess pressure or vacuum.

Then, too, the B. S. & B. service is swan-like in its EASE of action, functioning as smoothly as the swan swims. It is keyed to the creed of the oil men, who desire or require service RIGHT NOW. "FROM A BRANCH TO YOUR LEASE IN A FEW HOURS TIME" is no idle phrase with us, for action is the keynote, and our watchword is "quick service."

To perform our "Service on the Dot—Service on the Spot" we have 50 field stations scattered throughout the Mid-Continent and Rocky Mountain Oil Fields, and extending as far as Okotoks, Alberta, Canada, and Maracaibo, Venezuela, (Sales Representatives only) in which complete stocks are carried, and there are our own tank crews always on the job ready to deliver and erect the B. S. & B. PERFECTION Vapor Pressure Tanks. These men are protected by compensation insurance, and you are protected by public liability, both of which are items which should not be overlooked in the erection of heavy oil equipment.

"Service on the Dot" ● *"Service on the Spot"*

PRINCIPAL BRANCHES

ARKANSAS
El Dorado

OKLAHOMA
Bartlesville
Blackwell
Bristow
Drumright
Duncan
Earlsboro
Garber
Hominy
Oklahoma City
Okmulgee
Sasakwa
Seminole
Tulsa

LOUISIANA
Shreveport

KANSAS
Augusta
El Dorado
Eureka
Hutchinson
Madison
Russell
Valley Center
Wichita

TEXAS
Amarillo
Borger
Big Spring
Breckenridge
Cross Plains
Dayton
Fort Worth
Houston
McCamey
Midland
Odessa
Pampa
Pyote
Ranger
Tyler
Wink

WYOMING
Casper
Cody

MISSOURI
Kansas City

NEW MEXICO
Artesia
New Hobbs

MONTANA
Kevin

FOREIGN
Canada
Calgary, Alta.
Okotoks, Alta.
South America
Maracaibo, Venez.

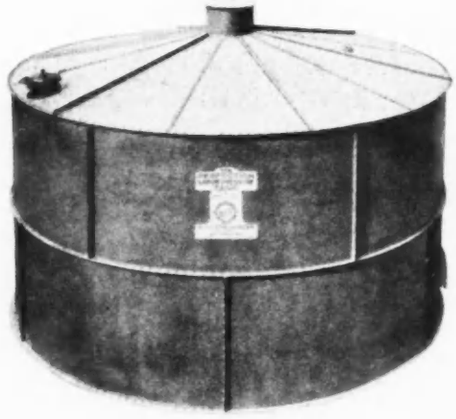
Our Watchword QUICK SERVICE

B.S.&B. Perfection Vapor Pressure TANKS

These are tanks of strength and usefulness—also swans of service. And the beauty about these tanks is the amount of money they save the producer, in that they prevent evaporation loss and maintain the crude at well-head gravity. This often means a saving of as much as five barrels per day (in a 250 barrel tank). It also means that the gravity of your crude is not lowered, and that assures you a better price.

Remember, the fresher the oil, the more volatile it is, and the greater the evaporation loss—this tank keeps your entire production intact and makes it possible for you to release all that production to the pipe line. These are Vapor Pressure Tight Tanks, and are truly *"The Watch Dog of Your Crude."*

"Trifles make Perfection, but perfection is no Trifle"



As the ugly duckling turned into the swan, so may a simple inquiry on your part develop into a beautiful story in your Production Cost Records by saving the usual evaporation loss. That inquiry addressed to Dept. X-17 will bring forth a salesman, or a sales letter, as you prefer.

PRODUCTS B S&B SERVICE

Black Sivalls & Bryson INC.
BARTLESVILLE - OKLAHOMA

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(*Continued from page* 23)

tion. Such a bond issue secured by such a group of properties should not be too difficult to float at a fair interest rate and with reasonable provisions for sinking fund or other amortization. Also the larger producers joining in the unit operation on an undivided interest basis would contribute their shares of the funds to take care of their operations.

"In all of these things it would be assumed necessarily that proper valuations of properties would be worked out by capable engineers and geologists and that all operators joining in the corporation would agree to accept the valuations of such a board, with provisions—if need be—for appeal in contested cases to a board of arbiters. By this time the East Texas field has reached such a point in its development that engineers and appraisers could determine very closely how much oil could be expected to be produced from each property in the field. The mineral and fee or royalty interests should also be evaluated and opportunity should be given for the owners thereof to participate in the corporation in like manner with the lessees, making arrangements to reimburse them for their actual expenses and issue stock for their equities above expenses.

"Assuming that the field will produce 1,500,000,000 barrels during its life and that this oil has a real value in the ground, under a system of operations such as I am proposing, a company to own and operate the whole property would be capitalized at the value in the ground of all of the oil in the field, if all operators would join in the corporation. If 50 per cent joined in, there would be justification for a capitalization just half as large. And such a capitalization, based on proper valuations, would justify a sufficient bond issue for the purposes which have already been described. Whatever bond issue was found necessary, there should be little difficulty in floating same with the endorsement of such a board of engineers as is proposed and with the moral support that would be given such a proposition by the major companies. Thus, if an operator had a property valued at $200,000 and he had spent $60,000 for actual development, he would receive back his $60,000 in cash and would receive $140,000 stock in the corporation. With the stock and bonds listed on the New York Stock Exchange or the Curb for quick sale and for credit safety, he would have an immediate market for his stock at any time he needed to sell. He would have an asset which his banks would recognize as collateral and he would have a stock equity in a corporation which would be committed to the policy of paying out dividends as rapidly as earned, after due consideration had been given to the necessities of taking care of its bond issue, interest and sinking fund and of providing an adequate surplus.

"For such a plan to be thoroughly effective, assurance should be given the independent operators joining therein that their corporation would be allowed to work out its own destiny and that it would have full voice in the operation of the field with committee supervision such as in Van and in Kettleman Hills. Furthermore, the power of fixing the outlet and agreeing upon the price for crude oil with the pipe line companies should be in the hands of this corporation or of the committee supervising the operation."

Other speakers before this session discussing the question of proration with particular reference to East Texas include Judge C. V. Terrell, chairman of the Texas Railroad Commission, who reviewed the efforts of the commission to promulgate proration orders and denounced a situation whereby it is possible by the filing of injunctions to set at nought the orders of the commission.

More of the problems of proration and production control were discussed by Charles F. Roeser, chairman of the East Texas Proration Committee; E. A. Landreth, chairman of the West Texas Proration Committee, and E. B. Reeser, President of the American Petroleum Institute, who told the operators that there are "too many jackasses in the industry to make it possible to achieve results through cooperative effort."

A paper on the "Legal Aspects of Conservation of Oil Production" was presented by Robert E. Hardwicke, Fort Worth, and Warner Clark of Standard Oil Company of California, relieved the situation somewhat with a humorous allusion entitled "Proration in Retrospect—an A. D. 2031 Review."

E. S. Durwood Named Chairman Southwest A. P. I. Division

Dallas, Texas.—At a luncheon held here June 4, the southwestern district of the Division of Production of the American Petroleum Institute elected district officers and discussed informally plans for the coming fall meeting of the district which will probably be held in either Shreveport or Dallas.

E. S. Durwood, Shell Petroleum Corporation, Dallas, who has been secretary of the Southwestern District, succeeds W. H. Meier, Atlantic Oil Producing Company, Dallas, as chairman. New vice chairmen are: Blaine Johnson, Simms Oil Company, Dallas, for East Texas; Harvey Hardison, The California Company, Midland, for West Texas; F. M. Stauffer, Panhandle Refining Company, Wichita Falls, for North Central Texas; W. C. Thomas, Vacuum Oil Company, Houston, Gulf Coast; Col. J. O'Farrell, Standard Oil Company, El Dorado, Arkansas, for Louisiana and Arkansas, and John Ritter, Sun Oil Company, Dallas, was elected secretary.

John R. Suman, Humble Oil & Refining Company, Houston, is the new chairman of the district advisory committee which includes: E. G. Allen, Shell Petroleum Corporation, Dallas; E. H. Blum, Atlantic Oil Producing Company, Dallas; J. D. Collett, Collett and O'Keefe, Fort Worth; T. J. Donoghue, The Texas Company, Houston; E. S. Durwood, Dallas; F. V. Faulkner, Magnolia Petroleum Company, Dallas; Charles Fitzgerald, Pure Oil Pipe Pipe Line Company, Dallas; James Hutcheson, Rio Bravo Oil Company, Houston; R. H. Morrison, The California Company, Dallas; Blaine Johnson, Simms Oil Company, Dallas; Roy B. Jones, Panhandle Refining Company, Wichita Falls; F. Ray McGrew, Standard Pipe Line Company, Shreveport; Underwood Nazro, Gulf Production Company, Houston; M. B. Sweeney, Sun Oil Company, Dallas; B. S. SoRelle, Pure Oil Company, Fort Worth; and Frank Yount, Yount-Lee Oil Company, Beaumont.

Independent Association to Consider Import Restriction

Tulsa.—Directors of the Independent Petroleum Association of America have been called for a special meeting June 10 in Tulsa to consider matters of vital importance to the organization, its program and the welfare of the whole country. The program has been outlined by Wirt Franklin, president, at a meeting to consider:

"The distress caused by present prices.

"What position we, as an organization, will take on proration.

"The advisability of asking a special session of congress to restrict imports.

"Proper method of financing the campaign so approved by us. And other matters incident to our work should be cleared up at this meeting."

Pull *With*

1 "OILWELL" SAFETY SUCKER ROD HOOK

Handles the longest string of rods. Stabs easily and locks automatically. Hand pressure only opens latch. Guard protects hand from injury. Light, balanced, enduring. No projections to catch on derrick. Carbo-manganese steel, heat treated. 17,500 and 22,000-pound capacities. Folder No. 431.

2 IMPERIAL SUCKER ROD ELEVATOR

On or off in a flash. Holds fast until operator releases latch with slight finger pull. Body made in one piece and is reversible. Light, balanced; strong enough for heaviest strings. One size for 5/8″ and 3/4″ rods; one for 3/4″ and 7/8″. Folder No. 433.

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"OILWELL'S" BIG 3

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California Committee Recommendations Indorsed

Los Angeles. — A careful survey of economic conditions in the California petroleum industry, conducted by The California Oil Survey Committee, headed by Mark L. Requa, has resulted in a number of recommendations that offer possibilities for the solution of its difficulties. A complete report submitted to leaders of the California petroleum industry has won indorsement by many leading oil men in California, as well as the praise of the presidents of three leading major oil companies. The findings of this committee and proposals made carry an argument against continued over-production and over-expansion, not only in California but throughout the United States. The report particularly stressed excessive drilling, over-expansion of refining facilities and suggested that a three-cent differential should be maintained by all marketing companies between tank wagon and retail selling price of gasoline.

The committee was organized as an independent body of impartial parties, having no direct interests in the petroleum industry. It consists of Mark L. Requa, chairman, former general director of the Oil Division of the United States Fuel Administration; A. C. Balch, former president of the San Joaquin Light and Power Company; Roy N. Bishop, former president Sperry Flour Company; Harry H. Fair, president Pierce-Fair & Company, Investments; L. D. Ricketts, former president of Inspiration Consolidated Copper Company.

Following are the more important recommendations contained in the committee's report:

1—Rigid curtailment, proration and balancing of production with consumption. The committee feels that the industry, within itself, will remove the primary cause of its difficulties by unanimous agreement to follow out curtailment programs.

2—Assurance of a firm crude market by maintaining stable posted prices.

3—Increasing memberships in the recently formated Oil Producers Sales Agency of California, a non-profit corporation (an association of independent producers).

4—Prevention of additional refinery construction. Refining capacity far in excess of any possible consumption of refined products.

5—Formation of a co-operative organization of independent refiners.

6—Each marketing company should abandon the practice of making special sales contracts in any form.

7—Differentials between tank wagon and retail selling price of gasoline should not exceed three cents a gallon. Marketers should refuse to supply dealers who sell their products at cut prices.

8—Companies desiring to increase filling station outlets should do so as far as possible by purchasing existing filling stations. Stations are too numerous and should be decreased.

9—Modification of anti-trust laws, permitting actions obviously in the public interest, is imperative.

10—Organization of a board to act as an advisory counsel, to consider impartially such industrial problems as might be presented and render advisory opinions and seek public co-operation.

President Kingsbury, of Standard Oil Company of California, in commenting on the report, stated that his company unqualifiedly indorses and intends to adopt the findings and recommendations of this committee. President L. P. St. Clair, of Union Oil Company, called the report sound in principle and stated that its conclusions cannot be seriously disputed, further adding that Union Oil Company indorses the report and intends to observe its recommendations in every particular. President J. A. Brown, of General Petroleum Corporation, stated that his company will do everything within its power along the lines recommended and feels that their adoption by the industry cannot help but benefit.

Other comments on the report were equally favorable and it seems to be the general opinion on the Pacific Coast that adoption of the principles outlined will do much to bring about a readjustment of posted prices. Some are of the opinion that the wide-spread indorsement of the report will soon be reflected in the crude and gasoline market in California.

Wilbur Blames East Texas In Statement on Situation

Washington, D. C.—"Rapid and heedless" exploitation of the East Texas field is charged with responsibility for demorailzation of the oil industry in the Mid-Continent area by Secretary of the Interior Wilbur, chairman of the Federal Oil Conservation Board.

Fear that the situation might cause the four big importing oil companies to decline to extend their agreement to restrict imports beyond June 30 is indicated by statements of the secretary, urging that the field be at once brought under the proration programs now existing in the other fields of the country. The companies, Standard Oil Company (Indiana), through its subsidiary, Pan American Petroleum Corporation; Standard Oil Company of New Jersey, Gulf Oil Corporation, and Shell Petroleum Corporation, he said, have gone beyond their individual programs in the reduction of foreign oil imports into this country.

The secretary's statement gave the impression that the administration might urge the governor of Texas to call a special session of the legislature to meet the problem.

"In spite of the great efforts of the oil industry and the recommendations of the Oil States Advisory Committee," Secretary Wilbur declared, "there is continuing demoralization in the Mid-Continent due to the rapid and heedless exploitation of the East Texas field. Not only has this brought an abnormally low price but it is resulting in the usual wastes that come with overproduction.

"The importing oil companies have gone beyond their individual programs in the reduction of oil imports into this country from foreign fields.

"There has also been a considerable degree of mastery of the proration problem in all of the large producing states except Texas. There the attempt of the railroad commission to bring the new Texas field into the state program seems to be unsuccessful. There has been some discussion of the necessity for new legislation to meet the serious problems involved. I understand the governor of Texas, who is fully familiar with the situation, and desirous of doing everything

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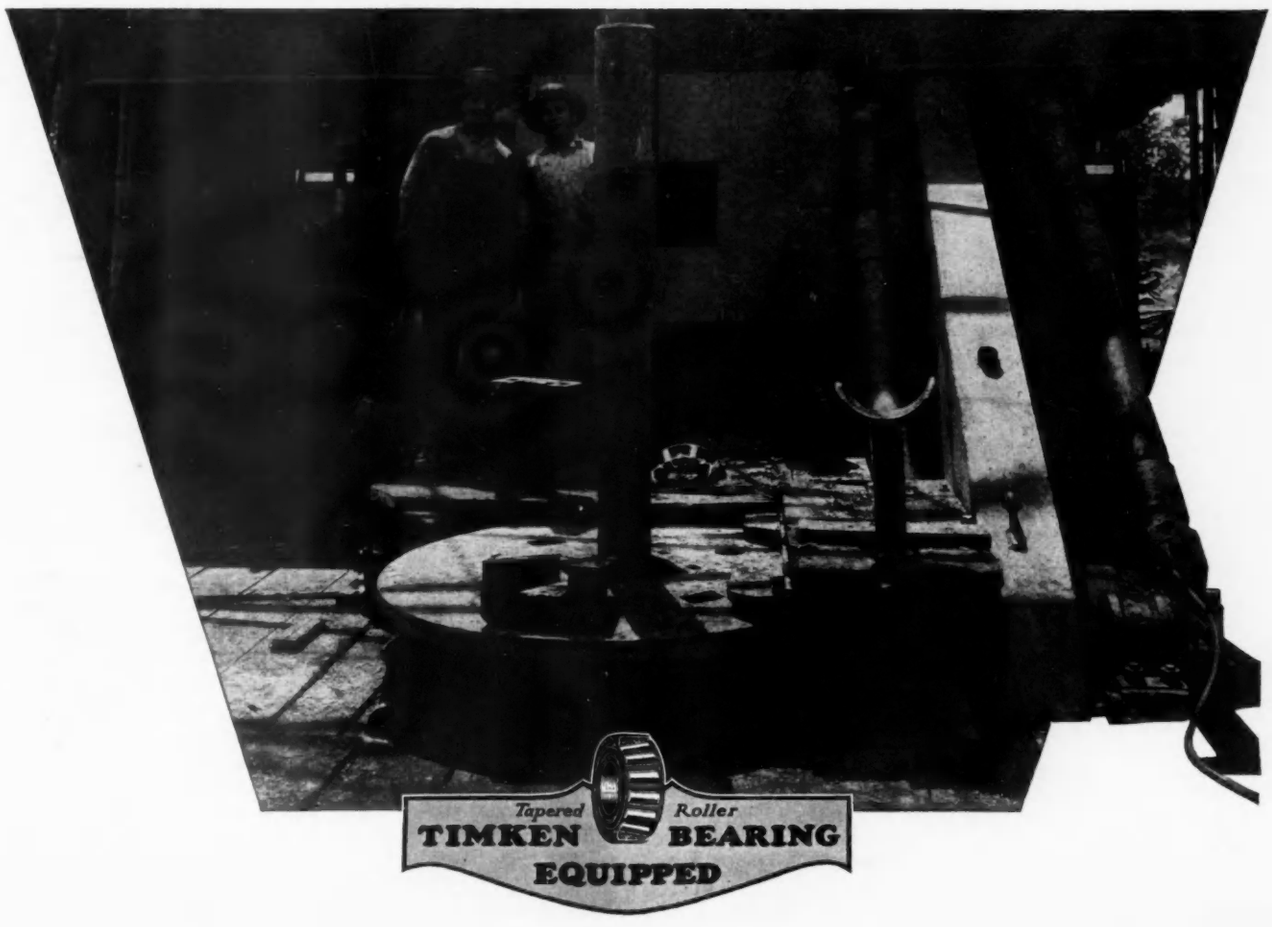

possible, is being urged to call a special session of the legislature.

"From a distance it would seem that there is no relief in sight for the oil industry in the Mid-Continent region until this new field in East Texas is brought under the normal proration programs now existing in the other fields of the country."

While the head of the oil conservation board was discussing conditions in Texas, the California Oil Survey Committee headed by Mark L. Requa, made public its report on the situation in that state, probably the most important recommendation of which, in Mr. Requa's opinion, was the proposal for the creation of an advisory counsel, disassociated from the oil industry, to which members of that industry could take their problems and differences for adjustment.

"The petroleum industrialists," he said in explanation of this recommendation, "have been victims of circumstances over which they have had little or no control. Individually they fully realized the menace and appreciated that that disaster might well overtake them. Collectively, however, they hesitated to act because of the civil and criminal penalties of the anti-trust laws. They may have been overly timid, but it is a well-known fact that the decisions in connection with the anti-trust laws are so conflicting that it is almost impossible to say in advance whether any given action would be legal or not."

The report, to large extent, is confined to affirmation of already existing avenues of relief and urges that the various methods so set up be adhered to.

Special Session of Texas Legislature Expected

Austin, Texas.—Governor Sterling is still considering the possibility of having to call a special session of the Texas legislature, having repeated the urgent need of considering legislation to assist in ironing out the difficulties of the oil industry in this state. Governor Sterling stated recently that it looks now that the only development which could reconstruct the oil situation in Texas would be the rapid encroachment of salt water in East Texas.

In commenting upon the oil outlook, C. V. Terrell, chairman of the Texas Railroad Commission stated that he expects the East Texas situation to be solved at an early date as everything seems to point to greater willingness on the part of all operators to abide by the orders of the commission. In his opinion, East Texas operators are rapidly coming to the realization that it is futile to continue producing more oil than the market can absorb.

The monthly report of the Oil and Gas Division of the Railroad Commission shows that permits to drill issued in May amounted to 381 for the East Texas area alone. Permits issued for the state during May amounted to 578. The report also shows that only 20 dry holes were completed in East Texas in May, against a total of 173 for the state.

Commission Call Proration Hearing at Austin June 22

Austin, Texas.—In a conference Tuesday afternoon the Texas Railroad Commission set June 22 as the date for the next state-wide proration hearing. At this hearing all proration orders will be consolidated. Although the order for the fields other than East Texas has three months to run after July 1, it is planned to issue a new order at the same time as the East Texas order is issued in order to have all of the fields in proportion to each other and to apportion the allowable fairly between all pools in the state.

Nominations of pipe line companies for the next 90-day period will be requested and will probably be sent directly to the commission at Austin since the resignation of David Donoghue from the central proration committee.

It is possible that the nominations for East Texas will be sent to the proration committee for that area as it seems to be functioning and able to handle the data. Several oil men will come here June 11 to confer with Governor Sterling concerning the calling of a special legislative session to assist the oil industry. Sentiment here is increasing against the calling of this session as there seems to be no method available of correcting the trouble at least so far as the legislature is concerned. Commissioner Terrell stated that the courts have upheld the right of the roilroad commission to issue and enforce proration orders in the Danciger case and until the supreme courts decide to the contrary he feels that no further legislation along this line is necessary. Unless the lawmakers would pass a statute allowing the state to assess penalties during the period of an injunction, Mr. Terrell feels that there is nothing that they can do to help out at this time. It is very doubtful if such a measure could pass either house as it would eliminate effectively the right of every individual to bring his case into the courts, as the loss of a suit under such a ruling would result in the ruin of the contesting party, at least in the case of the smaller independents who have filed the 15 injunction suits now in the courts.

Apparently both sides have agreed to drop the pipe line rate hearing which was scheduled for June 11 in Austin as the case has been indefinitely postponed by agreement of the parties. This brings to a close another fight of the Independent Petroleum Association against the major companies.

Institute Directors Talk East Texas at Banquet

Dallas, Texas.—At a banquet given the directors of the American Petroleum Institute here Thursday night, June 4, by Nathan Adams, president of the First National Bank, East Texas continued to be discussed as the sore spot in the oil industry.

Speakers at the dinner included E. B. Reeser, president of the American Petroleum Institute, W. S. Farish, president of Humble Oil & Refining Company, E. A. Landreth, and two East Texans, Col. R. M. Kelly of Longview and Guy Blount.

Houston.—Atlantic Pipe Line Company, as a further means of facilitating the handling of oil at Barbers Hill, has built an extension to its line running to the loading wharf on Cedar Bayou. The line was completed last week, making the loading terminal a distance of 12 miles from Barbers Hill.

The new line is approximately six miles long and is a continuation of the six-inch line to the old loading terminal formerly owned by Mills Bennett Production Company, which was sold to the Atlantic Pipe Line Company, January 3, 1931. The building of this extension and a new loading terminal on Cedar Bayou by Atlantic Pipe Line Company will enabile the purchasers of the Barbers Hill crude to handle the oil with less difficulty and less expense than was formerly necessary in handling the oil by barges from the greater distance up the bayou. About 40 per cent of the crude from Barbers Hill is bought by Atlantic Pipe Line Company and is shipped through this line and thence by barge to the Texas City terminal.

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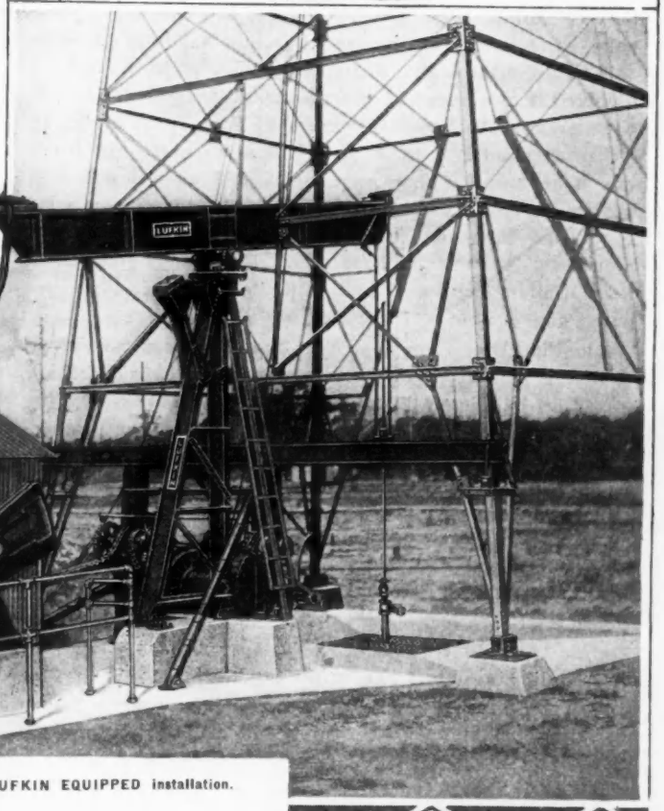

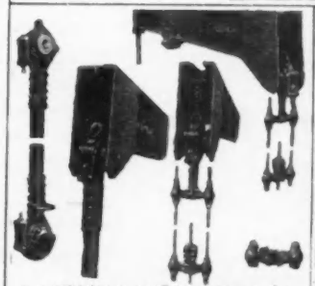

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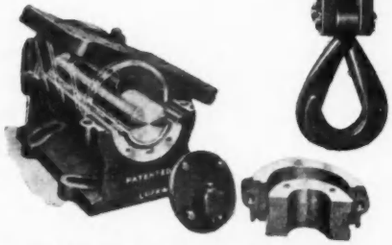

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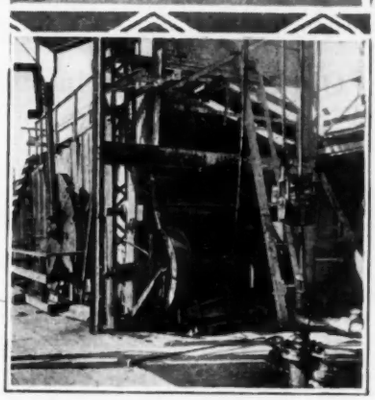

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Oil and Gas Pipe Line Activities

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Atlas Line Has North and South Traffic Alternately

Tyler, Texas.—Atlas Pipe Line Company has had a capacity load on its East Texas trunk line system, consisting of an eight-inch line from the Longview-Kilgore district to Jewella, near Shreveport, since making first crude runs about May 1, and is rushing construction work on an intermediate steam pump station about 10 miles southeast of Marshall to boost the capacity from 18,000 to about 24,000 barrels daily. This company was formerly known as Shreveport-El Dorado Pipe Line Company, and the old Shreveport- El Dorado pipe line system is now handling oil north and south alternately, owing to contracts in force that involve the movement of oil from Arkansas fields to Shreveport territory, and also movement of East Texas crudes to Arkansas plants. A tariff of 20 cents per barrel for trunk line haul, and 7½ cents per barrel field gathering charge applies on East Texas shipments to Arkansas plants. Atlas Pipe Line Company completed negotiations more than a month ago for the purchase of 22 55,000-barrel steel tanks near Minden, Louisiana, from Atlantic Oil Producing Company, and is now well fortified with storage.

Sun Pipe Line Company, East Texas division, has begun stringing pipe at several points along the route to be followed in building a 10-inch line from East Texas to the Gulf Coast, near Beaumont. Sun Oil Company and Yount-Lee Oil Company are 50-50 owners of this project, which will afford 40,000 barrels daily transportation facilties for the two concerns. The 10-inch unit will terminate on a 30-acre site out of the southwest corner of the Moses Thomas 79-acre farm, Pleasant McAnulty Survey, located on the north bank of the Sabine River and in the Longview field. An eight-inch line will extend northeast from this station to the north end of the Longview field to serve as a gathering system. The main line stations on Sun Pipe Line Company's system will be equipped with motor driven centrifugal pumps.

Work Progressing on Repairing Old Sinclair Oil Line for Gas

Casper, Wyo.—North Central Gas Company reports very satisfactory progress in its project of bringing a supply of natural gas from central Wyoming fields to towns and cities in eastern Wyoming and western Nebraska. For this purpose the old Sinclair oil pipe line is to be utilized for a part of the system, and Stanolind Pipe Line Company, which owns the line now, is repairing leaks and cleaning out the line between the Clayton tank farm and Bridgeport, Nebraska, the eastern terminus of the gas project. Distributing systems in Douglas, Torrington, and Scottsbluff are under construction, and work is at the same time going forward in other communities to be served by the system. A lateral from Guernsey to Wheatland will consist of six-inch pipe. It will be about 20 miles long.

Plan Finishing 200-Mile Gas Line in Montana September 1

Helena, Mont.—Winston Brothers of Minneapolis have opened offices in this city as well as in Butte and Anaconda as headquarters for their engineering work on the Montana Power Company's gas pipe line from the Cut Bank field to cities in the southwestern part of Montana. The main line of the system is to be more than 200 miles long, and will cost about $12,000,000. The A. O. Smith Corporation of Milwaukee is furnishing the 20-inch pipe. Crews are being put to work at three different places, so that the work may be rushed to completion by September 1. First unit will be that from Cut Bank to Wolf Creek; the second will be over the Continental Divide from Mullan to Elliston, with a lateral from Birdseye to Helena and East Helena; the third unit will be from Elliston to Butte and Aanaconda.

Under the direction of O'Neil interests, there are seven wells drilling for gas in the district north of the town of Cut Bank. No information concerning sands or formations is to be given out, under penalty of immediate discharge, by the drilling contractors.

Stringing Pipe for Magnolia Kilgore-Corsicana Pipe Line

Dallas, Texas.—Magnolia Pipe Line Company will begin welding on its 100-mile 12-inch trunk line to extend from Kilgore field to Corsicana about June 12, and first pipe for this connecting line is being strung along the right-of-way. The company has definitely decided to install a midway pump station along the above pipe line unit to afford a maximum capacity of about 52,000 barrels daily. Work is well along on the company's midway pump station located between Norris and Center stations on the 10-inch trunk line now serving East Texas, but operation of same will not take place until about June 20 because of about eight miles of new power line being necessary to supply the centrifugal pumping units with electric power. When completed this 10-inch line will be stepped up from 32,000 to 40,000 barrels daily capacity.

Bakersfield, Calif.—General Petroleum Corporation has started work on an eight-inch oil line to connect the Lost Hills and Belridge fields, the distance being about 20 miles. The pipe will be full seamless and the line will be of welded construction.

Los Angeles.—Golden Bear Oil Company is building a 6⅝-inch oil line between the Round Mountain field and loading terminals near Bakersfield, a distance of more than 10 miles. The line will be of welded construction.

Personal Mention—Men You Know

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Henry McGraw, president of Gypsy Oil Company, Tulsa, is reported critically ill at Johns Hopkins Hospital in Baltimore, Maryland. Mr. McGraw has been in the hospital for some time but was not considered dangerously ill until the past few days.

J. E. Eaton
Consulting geologist of Los Angeles.

Among the most recent assignments given Eaton was the mapping of the Coal Oil Point structure, near the Elwood field, which lies outside the mean high tide line. The submarine geology was done with the aid of divers and small boats.

Thos. J. Lipps, president Twin Bell Syndicate and the El Camino Refining Company, announces the removal of offices from the Chapman Building to the Rives-Strong Building, Los Angeles.

William C. McDuffie, receiver for Richfield Oil Company of California, left Los Angeles last week for New York City. He will go into the affairs of Richfield Oil Company of New York and attend to other business while in the East.

Isaac B. Newton, formerly third vice president of Union Oil Associates, has been elected president of the company, to fill the vacancy created by the death of E. W. Clark. Union Oil Associates is a holding company for a large block of Union Oil Company capital stock.

W. R. Fitch, independent oil operator of Bartlesville, Oklahoma, was a business visitor in Dallas late last week.

J. B. Wells, field superintendent for Magnolia Petroleum Company at Bull Bayou, Louisiana, has been transferred to Kilgore, Texas, and placed in charge of its field work in the Rusk, or south section of the East Texas district. E. N. Wilson, who has been in charge of the entire district, with headquarters at Longview, has been allotted the Longview, or north section, which is the scene of the bulk of the company's new work.

J. H. Wood, superintendent and W. S. Schmidt, right-of-way buyer, have been temporarily detached from the Atlantic Pipe Line Company's Texas-New Mexico division, and transferred to Philadelphia, to work on the gasoline line being built from the Philadelphia refinery of Atlantic Refining Company to a number of cities in western Pennsylvania and in New York. Keystone Pipe Line Company is a new subsidiary formed by Atlantic Refining Company to construct and operate the gasoline line.

John R. Riley and J. J. Fitzpatrick, representatives of the American Iron & Machine Works Company, Oklahoma City, have returned from a three week's trip in the Gulf Coast territory. Encouraging reports were made on sales of the New Shot Packed Pump, a new product of the American Iron & Machine Works.

H. E. Champion, manager of Champion Supply Company of Casper, Wyoming, has been spending some time in California.

John Thomas was appointed vice president in charge of sales at a recent meeting of the board of directors of the McIntosh & Seymour Corporation. Mr. Thomas is a native of Alabama, a graduate engineer and was for 10 years with General Electric Company, during the latter part of which period he was in charge of the marine section. He became general sales manager of McIntosh & Seymour Corporation in October, 1930.

Vincent R. Chapman, local purchasing agent for Creole Petroleum Corporation, of Maracaibo, is visiting in Tulsa, on vacation.

W. L. Holt, accountant for Creole Petroleum Corporation, of Maracaibo, recently returned to the United States on vacation. At the conclusion of his holiday, Mr. Holt, who is accompanied by Mrs. Holt, will return to the Creole's new headquarters at Quirequire, in Eastern Venezuela.

Dan Moriarity, general warehouseman for Creole Petroleum Corporation in Venezuela, was a recent arrival in New York, holiday bent.

S. P. Christensen, rig builder for Venezuela Gulf Oil Company, has returned to the United States on vacation.

Claude B. Freeman, office manager for the Dallas district offices of Sun Oil Company, made his first hole in one after years of golfing on June 5 while playing on a Dallas course. Freeman insists the event took place after working hours.

Claude C. Brown, California state gas administrator, has returned to San Francisco after spending some time in Los Angeles.

L. J. Whitney, secretary of Perkins Cementing, Incorporated, left Los Angeles last week on an extended Eastern vacation trip.

Djevad Eyoub
Geologist, Tampico, Mexico

Oklahoma--Kansas Field Notes

FLOYD SWINDELL, *Staff Representative, Tulsa, Oklahoma*

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Oklahoma City Production Extended to Business Area

Oklahoma City, Okla.—Completion last week of Capitol Producing & Refining Company's Refinery Site 1, NE NE SE, Section 4-11n-3w, extended production more than a half-mile westward when it came in flowing at an estimated rate of slightly more than 500 barrels per hour. At time of completion the company had given out no formation samples and several sets of formation tops are available. According to one interpretation Viola lime was encountered at 6395 to 6415 feet and Wilcox sand from 6515 to 6550 feet. This would establish the Upper Simpson-Viola contact a short distance east of the well and indicate that production in the Wilcox probably will not extend more than one or two locations farther west. Another set of tops places base of the Pennsylvanian at 6425 feet and reports no Viola lime. Regardless of which is correct it is not likely that production will be found far west of Refinery Site 1, since it found Wilcox considerably lower than wells immediately east of it and any further locations to the west may be below the oil-water contact. This is the first test and the first completion in Section 4 and brings production well up into the business section of Oklahoma City. Old gasoline storage tanks are being used for oil storage.

According to the present interpretation maximum width of Wilcox sand should be encountered at this point and the Refinery well proves that formation to have a productive width of slightly more than a mile. Average width on the south end of the pool was approximately one-half mile and geologists are predicting a uniformly decreasing width from one mile on the north end to one-half mile on the south end making the average about three-fourths of a mile along the southwest flank of the structure. Phillips Petroleum Company and Shell Petroleum Corporation's Emma Egermeir 1, SW SW SW Section 3-11n-3w, is located in the area between the so-called north and south Wilcox pools and will be of interest because of being the first well to test for Wilcox sand at this point on the structure. It is now being drilled below 3500 feet and will not be due for completion until late in the month or early in July.

Casing Change Increases Oklahoma City Initial

Oklahoma City, Okla.—Sections 3 and 10-11n-3w ran a close race for completion honors during the past week in the Oklahoma City pool when 11 of the 12 completions were in the two sections. Four wells in Section 3 had a total 24-hour initial of approximately 157,000 barrels and one was shut in with no gauge while six wells in Section 10 had a total 24-hour initial of 154,000 barrels.

T. B. Slick Estate's Classen-Edwards 3, NE SE SW Section 10-11n-3w, led the list with an initial flow of 3529 barrels in two hours with gas at the rate of 62,000,000 cubic feet. Total depth is 6501 feet. Ranking close to this well was E. A. McArthur et al's Kammerdiner 1, SE NE NW Section 3-11n-3w, which gauged 1680 barrels the first hour and was shut in. Production is coming from Wilcox sand at 6355 to 6500 feet with gas estimated at 52,000,000 cubic feet. During the later part of the hour it seemed to be decreasing slightly in rate of gas flow and increasing in oil and it is likely to make better than 50,000 barrels potential when the full four-hour gauge is taken. This well is located on a tract of about 5½ acres and under present city regulations is the last test that can be drilled to the northwest at this point on the structure.

Phillips Petroleum Company's Hare 1, NE SW SE Section 34-12n-3w, first location north of Slick Estate's Wespaco 1, was waiting on cement to set on the last string of casing at 6290 feet. T. B. Slick Estate's Classen-Edwards 2, SE SE SW Section 3-11n-3w, topped the Wilcox sand at 6346 feet and set casing at 6329 feet. Morgan Petroleum Company's Stout-Gibbons 1, NE SE SE Section 34-12n-3w, was drilling plug at 6215 feet with the casing set at 6243 feet, three feet below the top of the sand. All should be completed within the coming seven days. T. B. Slick Estate and Urschel are digging cellar for Long 1, SW NW SE Section 15-11n-3w, and Capitol Producing & Refining Company has announced location for Hills 1, SE NE SE, Section 4-11n-3w, south offset to the same company's Refinery Site 1 which was completed during the past week.

One practice which has been adhered to by most operators during the latter stages of development is likely to be revised since several wells have set nine-inch casing high on the Wilcox sand and secured larger initial production than their offsets. General practice has been to set nine-inch casing in or on top of the Checkerboard lime around 5200 to 5300 feet and 6⅝-inch in or on top of the Wilcox sand. Some operators have made a practice of setting the last string a few feet in the sand to shut off some of the gas which was being encountered in large volumes and which was proving a hazard in safely completing wells. It is understood that several operators have recently been well rewarded by setting the larger string on top of the producing formation and taking advantage of the full amount of gas.

No Prospect of Revival of Activity in Seminole Area

Seminole, Okla.—With the exception of a few drilling wells in the Carr City pool, the Seminole district has taken on all of the appearances of an old settled area and under the present market condition no acceleration is expected. Three wells were completed and one is drilling in the Carr City pool. Prairie Oil & Gas Company's Hyde 6, NW SE NW, Section 2-8n-5e, encountered top of the Misener sand at 3912 feet, Hunton lime from 3925 to 3927 feet and Wilcox sand at 4155 to 4174 feet. It was given two 35-quart shots after which it swabbed and flowed 490 barrels in 24 hours from Misener, Hunton and Wilcox. It was tubed and shut in for 16 days to satisfy proration requirements. Amerada Petroleum Corporation's Tiger 2, SE SW NE Section 3-8n-5e, swabbed 290 barrels in 10 hours from Wil-

cox at 4197 to 4207 feet. Operators are preparing to drill deeper. Empire Oil & Refining Company's Brown 3, NW NE SE Section 3-8n-5e, topped Viola lime at 4093 feet and was drilling at 4095 feet. Prairie Oil & Gas Company's L. Tiger 2, SW SE NE Section 3-8n-5e, encountered top of the Misener sand at 3954 feet, Sylvan shale at 3995 feet and was drilling at 4035 feet and flowing at the rate of about seven barrels per hour from the Misener sand.

Probably the most interesting test in the district is Prairie Oil & Gas Company's Sager 1, SEc SW Section 8-9n-6e, west offset to Turman Oil Company et al's Phillips 1, extension or discovery well completed several months ago. Much confusion exists as to correct tops on the upper formations in Phillips 1, which was reported to have had Mayes lime at 3865 and also at 3835 feet. Mayes is reported at 3860 feet in the Sager 1. Assuming that 3865 feet is the correct Mayes top in Phillips 1 it is one foot structurally lower, indicating that it is an extension to the East Earlsboro pool and not on a separate structure as suspected by some students of the Seminole district. Top of the Woodford in the Sager well is reported 21 feet structurally higher than in Phillips 1, which had that formation at 3965 feet. Correlations on the upper formations are indicative of what to expect in the producing horizons but Seminole formations are known to thicken and thin rapidly within short horizontal distances, so no dependable interpretation can be made on the basis of present information.

Southeast of Davenport

Mid-Continent Petroleum Corporation's Lillis 1, NE NE SE Section 9-13n-6e, about eight miles southeast of the Davenport pool in Lincoln County, encountered top of the Wilcox sand at 4250 feet and had a hole full of water at 4318 feet. It was plugged back to Hunton lime where it originally revealed a showing of gas estimated at about 5,000,000 cubic feet. A 40-quart shot in that formation resulted in an initial flow of approximately 13,000,000 cubic feet. Nearest production is in the Davenport pool.

Carter County, Four Tests, Busiest in South Oklahoma

Ardmore, Okla.—The Tatums pool in Carter County, with four drilling wells, is leading southern Oklahoma activity. K. D. Oil Company and Frank Gouin were coring broken oil sand topped at 2100 feet in J. W. Burton 1, CSW NW Section 30-1s-2w, about three-eighths of a mile south of production. In the opposite direction and about three-quarters of a mile northwest of production, Magnolia Petroleum Company was drilling below 1500 feet in Wirt Franklin 1, SW NW NE Section 15-1s-3w. Trevelyn Oil Company was drilling below 1000 feet in D. W. Ratliff 1, NE NW SW Section 19-1s-2w, on the eastern edge of the pool and Carter Oil Company was drilling at 500 feet in Paul Robb 2, SW SW NW Section 19-1s-2w, in the same sector. Outcome of these wells will largely govern activity in the area during the next few months. In the absence of commercial production which would force offsets, no further development is being considered until the market situation is improved except perhaps a few tests which may be drilled because of expiring leases.

Mid-Kansas Oil & Gas Company and Ramsey Petroleum Corporation are within about 800 feet of the Oklahoma drilling depth record in their Preston-Culp 6, NW NE NE Section 6-5n-9w, in the western portion of the Cement pool in Caddo County. At the time of last report drilling was at 7760 feet after coring shale at 7740 to 7750 feet. Magnolia Petroleum Company's Estes 2, SE SW NE Section 10-5n-9w, in the eastern part of the area was drilling at 4940 feet in blue shale.

Water Intrusion Depreciates Eastborough Producing Area

Wichita, Kansas.—Magnolia Petroleum Company completed Wheeler 5, SW N½ NE Section 19-27s-2e, at an estimated 200 barrels of oil with some water showing. Production is coming from chat at 2964 to 2967 feet. This makes 43 producers in the pool and practically all wells that have not been plugged back are making water. Derby Oil Company's East borough Estates 5, SE NW Section 19-27s-2e, west offset to Wheeler 5, set casing at 2951 feet on top of the chat and is waiting on cement to set. The same operator's Eastborough Estates 6, NW Section 19-27s-2e, is being spudded.

Early in the history of the Eastborough pool, the demand was good and all wells were pushed for maximum production. Its location in the eastern edge of Wichita within a few miles of local refineries made it exceptionally attractive because of the character of the oil and the relatively short distance to be transported. At the time its peak was reached many operators were insisting that it be prorated along with other pools in helping to overcome the overproduction situation that then existed in this state and others. A. L. Derby, president of the Derby Oil Company and one of the largest operators in the pool, insisted that this step not be taken because of water already showing up and the anticipation of water in large amounts at some time in the near future. Limitation of the pool to the west and east by dry holes and encroachment of water in all chat wells has now removed the pool as a threat although the structure is not fully defined in all directions.

Ritz-Decker-Garrett Area

The Ritz-Decker-Garrett pools in McPherson County continue to lead the state in activity and are the one spot in which anything like a drilling campaign is being carried on. Development of the area has reached a crisis in the matter of outlet. With demand remaining at about 6300 to 6500 barrels daily for the past several months, and more than 25 wells completed during that period, operators have watched the percentage of allowable production rapidly decline from 50 per cent to six per cent of unit potential. The average well is now allowed to produce approximately 100 barrels daily at gross income of $30 to $50 daily. With a large percentage of the chat wells making some water and being pumped on the beam, it is not hard to understand that something must be done. The market must be increased or the drilling campaign curtailed and under present conditions the latter seems most likely.

The pools now hold the distinction of having the largest gas well ever completed in Kansas and the largest oil well completed within recent years. As of June 1 there were 17 rigs and locations, 37 drilling wells, and nine locations shut down, making a total of 63 operations in the three pools. Syndicate Oil & Gas Company's Decker 1, SEc Section 36-19s-2w, made 275 barrels in 12 hours after being shot twice in the Viola lime horizon after failing to reveal anything of commercial value in the chat. Olson Drilling Company and Shell Petroleum Corporation are shut down waiting on cement to set on the last string of casing at 3383 feet in Johnson 2, SE SW NE Section 26-19s-2w. It is the second location north of the same operator's Johnson 1, which was a small well in the chat but recently drilled into the lime horizon. Olson Drilling Company set 6⅝-inch casing on top of Viola lime at 3377 feet in Koehn 2, NE SW SE of the same section. Both will be drilled in with cable tools and should be on the completion list within the next few days.

News From California Fields

BRAD MILLS, *Staff Representative, Los Angeles, California*

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Kettleman Hills Completions Initial Smaller Than Average

Coalinga, Calif. — Two wells were completed on the North Dome at Kettleman Hills during the week and both were much smaller producers than several previous completions which were located nearer the edge of the structure. The action of the most recent producers indicates that all wells on the North Dome will not necessarily be large producers and gives the field a slightly spotted appearance for the first time in months. The completions were Continental Oil Company's No. 41-2P and Standard Oil Company's No. 32-3P and the new wells were expected to be much larger producers than they proved to be on actual tests.

No. 41-2P, which was taken over by Kettleman North Dome Association, was completed at 7879 feet and produced 3700 barrels of 37 gravity oil during the first day. Gas production was about 12,000,000 cubic feet. Flowing through three one-inch beans, this well made a somewhat disappointing showing.

Standard Oil Company's No. 32-3P, located about two miles up structure from Superior Oil Company's Huffman lease, was completed at 7786 feet with an initial production of 4000 barrels of 36 gravity oil. This new well is flowing through a small bean and would produce more oil if opened up.

Kettleman North Dome Association is preparing to complete two more wells, both being located on Pacific Western Oil Company's former leases. No. 2-1P will be completed at 8367 feet and will be the deepest producer in the field. A string of nine-inch casing was cemented over the Temblor at 6730 feet, but 1039 feet of 5¾-inch liner was run and cemented through perforations at 7422 feet to shut off the upper gas zone. This should be an unusually good producer. No. 27-34J is being completed at 8043 feet. The 8⅝-inch string was cemented at 6420 feet, followed by 1657 feet of 6⅝-inch liner which was cemented through perforations at 7494 feet to exclude the gas zone. Both of these wells are favorably located.

Standard Oil Company has been active in the field for several months, having been forced to offset several of its leases. All of its five North Dome tests are below 7000 feet, with No. 6-29V, the lone Middle Dome test changing to heavier mud at 5336 feet. No. 47-35J is drilling at 8225 feet and No. 85-29J is making good time in oil sand at 8165 feet. Both of these wells will be completed within a few weeks. No. 65-29J has been held up for months with a difficult fishing job at 7735 feet. This is an offset to Superior Oil Company's Huffman 1 and should have been completed soon after January 1.

The combined production of Petroleum Securities Company's Felix 1 and 2 has declined to 9500 barrels. The gas production is only 11,700,000 cubic feet, giving these two producers a clean slate in this respect. The oil is clean and no free water has made its appearance.

Standard Oil Company's No. 21-33J, completed 10 days ago with an initial production of 10,000 barrels, has been reduced to a flow of 9000 barrels from 7952 feet.

Superior Oil Company's Huffman 1 is holding remarkably steady with a production of 11,100 barrels of 36.3 gravity oil from 8323 feet. Gas production has declined to 15,000,000 cubic feet and the well is easily within the limit of waste defined by the state, as far as gas-oil ratio is concerned.

North American Oil Consolidated has reached 7900 feet in Blauvelt 1, Section 36-21-17, but has not reached the top of the Temblor formation. The brown shale is showing some gas. This well may be forced to go almost 9000 feet to obtain the proper penetration of formation and to exclude the gas producing formation. It is considered a wildcat, but stands a chance at commercial production. A record string of 13⅜-inch casing—6763 feet—was landed in this well.

Petroleum Securities Company is drilling ahead under pressure at 6500 feet in Burbank 1, a Middle Dome test which is considered one of the most important wells ever drilled in the district. A special packer is being used. This well had some difficulty in getting through the shale around 5500 feet. A string of 11¾-inch casing was cemented at 5488 feet. The Middle Dome has not had many representative tests, but is regarded as productive per acre as the North Dome by some geologists.

Shell Oil Company will soon complete Dixon 1, which has been drilled to a record depth of 8600 feet. This well is located on the north flank, but is considered within the producing limits of the North Dome. A large producer at this point would give the other edge tests nearby a much better chance at production.

Superior Oil Company has started a third well on the 160-acre Huffman lease, a tract on the extreme northwestern part of the North Dome which extended the field in no uncertain terms. The company already has two producing wells on the lease. Huffman 2, recently completed with an initial production of 21,000 barrels, has been beaned back to 1000 barrels.

Important Discovery In Weed Patch Field

Bakersfield, Calif.—Shell Oil Company apparently has made an important additional discovery in the Weed Patch field, a few miles southeast of Bakersfield, with Porter-Day 1, the discovery well around 5900 feet, showing 37 gravity oil at 7963 feet. This well has an interesting history and has been tested at several depths. A small amount of oil was obtained just below 5000 feet and a much better showing recorded at 5500 feet. The production test at 5962 feet was successful and the well flowed 1000 barrels of heavy oil. This marked the discovery of a new field, but the company was anxious to test the lower formations. The well was killed and deepened in stages to 8419 feet. The hole was plugged back about 200 feet and a string of 4¾-inch casing cemented under pressure at 7905 feet. The hole was cleaned out to 7967 feet and swabbed for a production test. The well failed to flow but the fluid which rose in the hole

at the rate of 100 barrels per hour showed light oil and a smaller amount of water.

Shell Oil Company's Morris 1 is being tested at 5785 feet, following the landing of a string of 9⅝-inch casing at 5675 feet. This well checked roughly with the discovery well, but was slightly higher on structure, if the present showings have been classified correctly. Very little drilling has been done on the structure, which appears flat from the surface.

Preparing to Make Test on North Belridge Deep Well

Bakersfield, Calif.—Associated Oil Company is rigging up traps and equipment to complete Reward 4, its first deep test in the North Belridge field. The well was drilled to 5510 feet and will be tested from 500 feet of Temblor formation. A string of 11¾-inch casing was cemented at 4998 feet and cores have shown good uniformity below the final shutoff. The narrow structure has been a puzzle to operators who have drilled on the north flank. Associated Oil Company's first test checked only a few feet lower than Belridge Oil Company's discovery well and should prove to be somewhere near the top of the structure.

Standard Oil Company has cored oil sand in McPhail 1 and will run a string of casing to effect a water shutoff. The well was drilled to 5591 feet.

General Petroleum Corporation's Berry 1, the first deep test in the main Belridge field, has passed 4600 feet, following a successful 13⅜-inch water shutoff at 4535 feet. This well is testing the possibilities of the Temblor formation in this field.

Shut Down Huntington Beach Deep Wells Without Testing

Huntington Beach, Calif.—Superior Oil Company will not test any one of its three deep wells at Huntington Beach, temporarily averting the possibility of another flood of oil from a new deep zone. The most recent wells to be shut down are Eberle 1 and Gillette 7-2, the former standing at 7177 feet and the latter at 6990 feet. The first well to reach the deep zone was Superior Oil Company's Fee 1, which was tested unsuccessfully just below 7000 feet. The well was drilled to 7491 feet and shut down without a production test. Two more shallow wells were immediately killed for deepening to the deep zone. This led to the belief that the deepest formation in the first well should prove productive. Eberle 1 and Gillette 1 were deepened in good time and nine-inch casing was landed on bottom in both tests. The shutting down of these three wells was a wise move, since the company probably would have been forced to sell any production obtained from a new zone at a fraction of the posted prices of two years ago. The suspension was a blow to several operators who were prepared to start wells to any deeper producing formations. Several locations have been made which were contingent on the result of the first production test.

Having Difficulty Making Deepest Oil Well Produce

Ventura, Calif.—Chanslor-Canfield Midway Oil Company has been unable to make a producing well of Hobson A2, the Rincon wildcat which was drilled to 10,030 feet to set a new world record. The well has been swabbed for several days, but the fluid has shown only a small amount of oil. The fluid level is at 1400 feet, with the swab being run to 2600 feet. A string of 2½-inch tubing was run to 7600 feet for the production test. The company was not enthusiastic over its chances of obtaining commercial production, but decided to make the test as an experiment. Streaks of oil sand were cut below 7479 feet and failure to develop a higher gas pressure was disappointing. The well produced oil on the compressor at 7479 feet but the addition of another 2500 feet of open hole proved a handicap in forcing the fluid up such a great distance. Several streaks of sand which might be classed as questionable were cut, but there was no definite signs of water below the final shut-off. Continental Oil Company is drilling at 4300 feet in No. 1, an offset to the record well, and expects to find the producing formation considerably above 10,000 feet.

Deep Tests at Lost Hills Offer Little Encouragement

Bakersfield, Calif.—The Lost Hills field remains as much a puzzle in the deep zone as ever, all three tests which are now drilling at various levels offering little encouragement. Universal Consolidated Oil Company is coring in oil sand and shale at 5620 feet in No. 49 and may run another string of casing to test the most recent showings. A formation tester was run to 5550 feet, but no definite results were obtained. This well has cut various streaks of sand which showed some oil and gas, but it has passed the promising stage. The last casing was 4¾-inch at 5198 feet, making it a difficult matter to effect a deeper shutoff. This well has been tested at various levels from 5000 feet to bottom. George F. Getty, Inc., has cemented a string of 6⅝-inch casing at 4077 feet in Lincoln 1A and will test a formation immediately below the shutoff. A good body of shale was found for landing the casing and the decision to run the casing was reached after considering the possibility of a producing formation below the body. General Petroleum Corporation has forced its way through the tricky formations found between 2000 and 3000 feet and is coring ahead at 3300 feet in No. 1. These three tests should determine the value of the Temblor formation in the Lost Hills field.

Playa del Rey Production Decline Slow; Small Wells

Los Angeles.—Ability of the Playa del Rey field to hold around 30,000 barrels fulfills the prediction that production in this area should decline slowly, despite the unprofitable experience of most operators. A small average initial production and the low crude prices failed to check developments in the town-lot district until nearly all available locations were drilled. Active drilling wells total only 15, while the idle wells, rigs and locations stand at 80. There are 156 producing wells, of which only one is flowing more than 1000 barrels. The record producer is Herndon Petroleum Company's No. 2, which is flowing 2000 barrels of clean oil. The next best producer is flowing less than 900 barrels, while the field can boast of only 12 wells which are flowing more than 500 barrels each. Of the 156 producing wells, 45 are pumping or flowing less than 100 barrels each.

Union Oil Company has been able to make a consistent producer of Vidor 1, a southeast extension test which was drilled to 5911 feet. The well was swabbed but the gas pressure was too low to start the flow. The fact that the oil is clean is important and means that the gap between the well and production may be filled in.

New Mexico and Rocky Mountain Area

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Hobbs Field Sets Example Of Orderly Proration

Hobbs, New Mexico.—Hobbs field continues to set an example for orderly proration enforcement, which has been in effect in this major oil area since July 10, 1930. According to records of C. G. Staley, field umpire, the allowable production since the inauguration of proration to the close of May was 10,623,050 barrels, while actual production during this period reached an aggregate of 10,617,412 barrels, or a net shortage of 5,638 barrels. This shortage is largely due to several units not being able to produce allowable quota.

Production in the Hobbs field advanced to a new peak level since adoption of proration when 1,146,353 barrels were produced during May. Allowable production during June is to be the same.

Porcupine Dome Test Gets By Tools Lost in the Hole

Billings, Mont.—After continued difficulties in its exploratory work on the Porcupine dome structure, south central Montana, Prairie Oil & Gas Company reported last week that it had succeeded in drilling past the tools and casing in the hole at 1944 feet, and was continuing to 2415 feet where the well is now bottomed. Repeated failures have been occasioned on Porcupine dome in the years since its discovery, large production of water encountered around 2000 feet always having prevented a test from reaching possible oil producing sands in deeper horizons. Another test started on the structure which has been standing at 1360 feet for some months, is being cleaned out and material assembled to resume drilling.

Kennewick, Wash.—Exploration work in the neighborhood of Badger Mount, nine miles east of here, was started recently by Northwestern Natural Gas Corporation. Holes will be drilled 1000 feet deep to ascertain sub-surface geological conditions, and information gained this way will be used to locate a deep test on the structure. Geological survey conducted by the company tends to prove that the basalt is less thick in this district than in other parts of the Yakima Valley. It is believed possible that some of the test holes may develop gas in the shallow sands, as at Rattlesnake Hills field.

Eastern Colorado Gets New Entrants Regularly

Fort Morgan, Colo.—Eastern Colorado continues to receive a big play from operators in this territory, with new entrants on the scene making appearance almost daily. It has been announced that the Beebe Draw structure has been taken over by Midwest Refining Company on a unit operation basis in which all royalty owners will share equally. Beebe Draw is 10 miles southeast of Greeley, and embraces about 6720 acres extending five miles north-and-south and two miles east-and-west. Continental Oil Company had previously done core drilling and geological work on the structure. The active operation of the Reiter-Foster Oil Corporation,—the only one actually drilling at present,—has been held up at 4330 feet for boiler repairs.

On the Fort Morgan anticline, Indian Territory Illuminating Oil Company is moving in quantities of rotary drilling equipment with which it plans to complete its test which has been standing bottomed at 4090 feet. Continued hole trouble forced the company to change to rotary.

Newly organized Eureka Syndicate, composed of Fort Morgan and Denver men, plans to drill a deep test for oil seven miles northwest of Weldona in Morgan County, near Jackson Lake. Contract is let to W. M. Conley for this work.

Cut Bank, Mont.—The B & H Oil Company's oil well in the Cut Bank territory, six miles north of the town of Cut Bank, swabs about 30 barrels per day of high grade oil, although the hole is in such bad shape that it has been impossible to run tubing.

Orchard, Colo.—Independent Oil & Refining Company has recently been organized for the purpose of operating a refinery at Orchard. Site for refinery is secured, and company is now acquiring right-of-way for pipe line from the Greasewood dome structure. A. C. Grandbouche of Denver is trustee for the group organizing the company.

Interesting Wildcat on Fiddle Creek Structure

Osage, Wyo.—An interesting wildcat well which is to be completed this season by the Osage-Wyoming Oil Company is Witzell 1 on the Fiddler Creek structure, just west of the Osage field. The test is being backed by Julius Peters and others of Montana and Detroit. Fiddler Creek was discovered about 10 years ago, and three years ago a well was started there and drilled to 1600 feet where it has been standing since. The Muddy sand is anticipated around 3300 feet, and is the ultimate objective. The Wall Creek at 2000 feet may, however, prove productive.

Artesia, N. M.—Material for the skimming plant to be built 23 miles east of Artesia is being assembled by Gray Coggin for Grayburg Oil Company; plant is expected to be in operation by June 15. It will have a capacity of 120 barrels per day, and will be operated under the name of Desert Refining Company.

Casper, Wyo.—Rash, Rathvon & Hogan, of Casper, have been given the contract to repair the 11 shut-in wells on the Teapot Dome Naval Reserve, according to announcement made last week by Commander A. A. Baker, inspector of Naval oil shale and petroleum reserves. Rash, Rathvon & Hogan's bid was $18,500 and was the lowest of four bids submitted.

Spokane, Wash.—An act of the legislature making it illegal for any one individual to hold more than 640 acres of leases on public domain oil and gas lands was affirmed by Washington state supreme court. This was a reversal of a decision by a lower court.

East Central Texas Field Notes

H. H. KING, ***Staff Representative, Fort Worth, Texas***

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Smith County Wells Avoid Water by Careful Drilling

Tyler, Texas.—New completions made recently around producing oil wells in Smith County section of the Joiner field that showed water have avoided cut oil troubles by taking only a few feet of the Woodbine sand horizon. Sinclair Oil & Gas Company's W. B. Jarvis 1, which made 235 barrels oil per hour April 27 at 3698-3710 feet, then when opened up for steady production two weeks later showed seven per cent water with 2000 barrels fluid daily, is now pinched to its proration quota and free of water. Sun Oil Company's A. V. Ritch 1-A, a south offset, was completed recently making 117 barrels per hour at 3663-3669 feet, or 3308 feet below sea-level. Sun Oil Company's J. J. Denton 1, located in the same area, also halted three feet in the Woodbine sand at a total depth of 3698 feet, or 3306 feet below sea-level, and flowed 170 barrels oil per hour via open tubing. Magnolia Petroleum Company's Roy Loosier 1 penetrated four feet into the oil sand at a total depth of 3672 feet, and gauged 55 barrels clean oil first 15 minutes on open flow via tubing, with 160 pounds back pressure. The oil from the latter tested 65 degrees temperature.

Longview, Texas.—Continuation of the productive limits of the Longview field beyond the western border of Gregg County became doubtful during the past week when Walker & Harrison et al's E. L. Walker 1, located on nearest bank of the Sabine River and about one mile southwest of Gladewater, failed to produce after a prolonged swabbing test from broken sand at 3525-3592 feet. Casing was cemented at 3507 feet. This test has a sub-sea depth of 3322 feet, and made a few small heads of oil after repeated swabbing, but exhausted the oil source late in the week. A shale break in the upper and lower Woodbine horizons has been encountered in a number of wells in the western portion of Gregg County, and the owners plan to risk bottom hole water by deepening the test through the shale formation logged at the bottom. Failure of a reasonable volume of fluid to enter the hole on Walker 1 may be partially due to a clogged liner.

Selby Oil & Gas Company et al's H. R. Snavely 1, J. R. Crosby Survey, located several miles due south of Gladewater, gauged 928 barrels of oil per hour from sand at 3544-3595 feet. This well has a minus bottom hole depth of 3317 feet, and is a larger producer than the first producer in the area that was completed April 7 by the same interests on the northeast corner of the P. J. Snavely 314-acre farm, Wm. Tynedale Survey.

Owen-Sloan Oil Company et al's M. Starnes 2, Sam Epps Survey, located in northeast Smith County and due west of Gladewater, was definitely removed from the picture as a possible source of new production during the past week after showing salt water on drill stem test at 3879-3900 feet. First Woodbine sand was reported in this test at 3805 feet, with a surface elevation of 357 feet.

S. A. Guiberson, Jr., of California, as associates scored a heavy producer in the north section of the Longview field in completing Thrasher-Stuckey 1, G. W. Hooper Survey, making 1018 barrels per hour, open flow, from regular sand at 3570-3620 feet. Stanolind Oil & Gas Company-Simms Oil Company's Flewellen 1, Marshall Mann Survey, a south offset to the northernmost producer in Gregg County, failed to fulfill expectations, and gauged 48 barrels the first 15 minutes open flow through tubing from broken sand at 3643-3670 feet. Gas production was abnormally low in this producer. Only about 10 feet of good saturated sand was logged. The gas flow of E. E. Eslick-Little et al's Nicholson 1, a north offset, was estimated about 15,000,000 cubic feet daily.

Entrance of Atlantic Oil Producing Company as a developer of Gregg County acreage during the past week after having acquired about 800 acres in scattered tracts is the forerunner of another trunk line outlet for East Texas. This company is drilling its first well on the J. J. Fuller 50-acre lease, M. Irwin Survey, located near the northwest line of the county. Atlantic Refining Company, the parent organization, has been a heavy buyer of East Texas crude in recent months, and will utilize all oil produced by its subsidiary, while Atlantic Pipe Line Company is slated to build a trunk line extension from East Texas to tie into its New Mexico-West Texas line in south central part of the state.

Drilling Curtailment Following Low Prices

Tyler, Texas.—Drilling curtailment orders received during the past week by some of the leading developers of productive leases in East Texas heralds the passings of the peak level on field operations before the close of June. A number of staked locations have been ordered cancelled in line with the curbing program, while adjoining lease owners are seeking agreements to eliminate competitive drilling as much as possible since the price of oil in the district has dropped to an average of about 25 cents per barrel.

Rusk and Gregg Counties barely eked out a new peak level

East Texas Operations

Expansion of field work in Rusk and Gregg Counties since the area reached important proportions is illustrated by the table below, showing operations on given dates:

Date	Locations	Derricks and Rigs	Active Tests	Totals
February 9	10	34	34	83
February 16	21	48	54	123
February 23	23	71	70	164
March 2	22	97	84	203
March 9	21	129	104	254
March 16	21	128	136	285
March 23	27	136	194	357
March 30	22	141	222	385
April 6	24	134	231	389
April 13	40	154	223	417
April 20	49	155	231	435
April 27	56	135	259	450
May 4	59	143	240	442
May 11	54	158	246	458
May 18	54	161	269	483
May 25	59	180	296	535
June 1	79	190	312	581
June 8	55	204	329	588

in field activity during the past week, having started the current week off with 588 operations listed, as compared to 581 operations one week previous. Locations sustained a sharp decrease, largely because of cancellations, but active tests jumped from 312 to 329. Operations in Smith and Upsher Counties are not included in the above figures, but these two counties are not showing the volume of new development that was anticipated some few weeks ago.

Kilgore's First Pumping Well Has Initial of 65 Barrels

Tyler, Texas.—An initial production of 65 barrels daily was officially given the first pumping well in the Kilgore field, which was credited with 314 flowing wells at the close of May. This lone pumper was drilled by Magnolia Petroleum Company on its D. Wells lease, Hy. Hobson Survey, located on the east edge of the original section of the field and in Rusk County. Wells 2 was drilled to 3646 feet without developing flowing production, and a standard rig was installed to pump. A similar fate befell E. B. Madden et al's Mose Mayfield 1, an east offset, that was drilled to 3734 feet, but has delayed going on pump. A pumping well in the Kilgore field, or any other section of the East Texas district can not be operated profitably under present market conditions.

The assumed danger line for bottom hole water on the west side of the Kilgore field failed to work when Southern Crude Oil Purchasing Company's G. Smith 1, located in southeast corner of 97-acre lease in Wm. Killen Survey and on west side of the railroad, gauged 113 barrels clean oil per hour June 7 flowing through three-fourths inch choke on 2½-inch tubing from Woodbine sand at 3758-3763 feet. This outpost well was drilled 3344 feet below sea level, and heretofore most west side wells in the Kilgore field have shown water when carried an equal sub-sea depth. Smith 1 produced normal temperature oil, which tested 80 degrees, and a corrected gravity of 41.3 degrees. Stanolind Oil & Gas Company, an affiliated company, will supply market outlet for this new well.

Townlot drilling at Overton is assured as result of R. H. Dearing & Sons' T. H. Goforth 1, located on 40-acre lease straddling W. G. Tutt and J. Lindley Surveys, having encountered oil sand at 3771-3776 feet, or 3287 feet below sea level. Casing has been cemented at 3760 feet, with completion scheduled for this week. This test is only a short distance northeast of the town.

Prairie Oil & Gas Company has joined the ranks of major companies developing production in East Texas, having completed a big producer on its J. Elder 47-acre lease, Wm. McCurry Survey, north portion of the Kilgore field. Elder 1 flowed 118 barrels per hour through three-fourths inch choke on tubing from sand at 3505-3551 feet. Other tests are being started by the company in Gregg County, and facilities of Sinclair-Texas Pipe Line Company will be used in transporting the production to Prairie Pipe Line Company's system in the Mexia district.

East Texas Production Decline Due Next Week

Tyler, Texas.—Maintaining an average of 500 barrels daily per well, East Texas advanced to a new peak level on production during the week ending 7 a. m. June 3, but the gain was negligible because of inability of proration violators to locate new market outlets of any consequence. The district averaged 351,475 barrels daily from 703 wells during the week, and at the end of this period the total oil recovery from the district since completion of the discovery well October 3, 1930, is estimated at 22,467,300 barrels.

Both Joiner and Longview areas receded in production during the past week after having attained peak levels on the week previous, while the Kilgore field continues to work its way back to record levels reached just prior to the introduction of proration at the close of April. During the past week the Kilgore field averaged 165,575 barrels daily from 311 wells. The Longview area averaged 66,712 barrels from 111 producers, and the Joiner section's 281 completed wells averaged 119,190 barrels daily for the week.

A decline in production for the district is virtually assured when next week's production figures are released, because of change in attitude toward proration by several of the major violators, who have encountered difficulty in booking new crude sales contracts at any prices.

East Texas Production

Daily average production of the Joiner-Kilgore district and the Longview field is shown below, with total number of production wells included:

	JOINER-KILGORE		LONGVIEW	
Week Ending—	No. Wells	Daily Average Production	No. Wells	Daily Average Production
February 18	22	19,090	1	6,511
February 25	24	24,954	1	7,044
March 4	39	51,475	1	4,578
March 11	50	75,170	1	7,170
March 18	64	75,540	5	14,021
March 25	81	104,345	6	17,769
April 1	115	119,500	11	24,990
April 8	159	165,250	16	26,000
April 15	198	210,208	25	38,180
April 22	234	239,515	30	58,480
April 29	298	271,070	39	68,715
May 6	344	216,650	46	52,250
May 13	434	208,900	58	48,550
May 20	463	242,300	70	61,510
May 27	524	279,072	86	71,017
June 3	592	284,765	111	66,710

Shelby County Well Making Another Test of Show

Shreveport, La.—Sloane Prospecting Company and Tokio Oil Company's Windham 1, A. H. English Survey, Shelby County, Texas, early this week was cementing a string of 4½-inch casing at 3399 feet, where 10 feet of broken chalk identified as Austin, had shown oil. A Layne and Bowler drill stem tester was run in the hole last week in an attempt to make the well flow after it made two heads of oil but it did not flow through the drill stem. Operators then tried to set two canvas packers with a lead seal but could not get on bottom. It was then decided to cement the 4½-inch string.

Four new locations were announced during the last week in Shelby County. Glidden and Stephenson are moving in derrick material for Pickering Lumber Company 1, Jonas Harrison Survey, for a 3600-foot test on a 4000-acre block. Ridgeway and associates made location on a 3000-acre block in Domingo Gonzales Survey, in the southeast part of Shelby County, about 10 miles west of Zwolle, Sabine Parish, production, the test to go to 4000 feet. George L. Pace made location for Powers 1, John Timms Survey, on a 4000-acre block. T. W. Tennant made location for Henry 1, John Spradley Survey, on a 5000-acre block.

Ryan Consolidated Petroleum Corporation's H. H. Key 1, E. Carroll Survey, Harrison County, an upper Trinity test, during the past week topped Pecan Gap at 1737 feet and went out of this formation at 2300 feet.

Mass Meeting Seeks Control Of East Texas by Legislation

Dallas, Texas.—Legislative control of the flood of low priced crude eminating from East Texas is to be sought by a non-partisan group of independent operators and royalty owners as result of a mass meeting held here June 8. About 300 interested oil men attended, and organized the Texas Oil Emergency Committee, consisting of 55 members from all oil producing areas of the state, and appointed a committee that will meet with Governor Sterling June 11 to discuss the needs for a special session of the legislature being called at an early date to pass adequate laws that are intended to force proration adherence.

Creation of a new organization to deal with the overproduction situation in East Texas and any other disturbing areas within the state originated at an informal meeting of oil producers during the mid-year meeting of the Division of Production of the American Petroleum Institute in Dallas last week. A preliminary meeting was held June 5 at the conclusion of the above session with E. A. Landreth, president of Landreth Production Corporation, Fort Worth, outlining the purpose of the mass meeting.

W. L. Todd, president of Columbia Oil & Gas Company, Dallas, was elected chairman of the Texas Oil Emergency Committee, and Frank P. Zoch, San Antonio oil producer, was appointed vice-chairman. Landreth was chosen secretary-treasurer.

Acting favorably on motion made by R. R. Penn, Dallas operator, who has been a leader among proration workers in the state for more than a year, the group agreed to authorize the general committee to largely confine its initial activities to securing adequate legislation, and to negotiate with East Texas producers with a view of curbing unnecessary drilling and reduce production to proration allowances. Chas. F. Roeser, Fort Worth producer and chairman of the East Texas Proration Advisory Committee, received the approval of the group on a motion offered for all operators to hold down drilling operations wherever possible. Motion was also approved for the formation of a committee to draft a new conservation bill to be presented to the governor in the event a special session of the legislature is called. This committee is to be made up of two representative oil men from the North, South, East and West Texas districts, and a lawyer from each of the districts will be selected by committee members to assist in drafting the bill.

No alliances are to be made with any existing oil industry organizations by the Texas Oil Emergency Committee, and it is to function, as its name indicates, as long as constructive work can be performed in stabilizing the oil industry in Texas, and conserve petroleum resources.

That there is room for such an organization became quite evident by the enthusiasm displayed by those attending the meeting. Opposing forces to proration enforcement in East Texas were severely criticized by speakers at the meeting and it was pointed out that a Tyler newspaper editor in waging a campaign against proration has cost the land owners of his community millions of dollars in revenues through decreased oil values, and likewise caused an upheaval in the crude price structure of the Southwest.

Sufficient political influence is believed to be at the command of those taking part in the Dallas meeting to bring about adequate legislation that will clamp the lid down on East Texas, and also prevent a repetition of such an occurance in the event of new oil strikes within the state. Major companies remained in the background, and took no active part, but with few exceptions, are known to be heartily in favor of the program projected by the committee.

EAST TEXAS HIGHLIGHTS

By H. H. KING
Staff Representative

Move Oil to Mexia

Stanolind Oil & Gas Company is reported to have arranged for the transportation of 10,000 barrels of East Texas crude daily via Humble Pipe Line Company's system to the Mexia district, where Stanolind interests have a large volume of idle steel tankage, or connection can be made with the trunk line system of Stanolind Pipe Line Company. Stanolind Oil & Gas Company is using tank cars for the movement of its current production in the Kilgore field, and the company is also absorbing all the production from joint interest properties held with Simms Oil Company in the Longview field.

Moving In Tanks

Mid-Kansas Oil & Gas Company is dismantling and re-conditioning seven additional 55,000-barrel steel tanks to be removed from points in the Mid-Continent to its tank farm near Camps, located in the Longview field. Construction work is underway on two 55's on this site, and locations have been staked for the other seven tanks. Illinois Pipe Line Company, an affiliated company, is operating a pipe line system in the Longview field that terminates at a 50-car rack near Camps, and pipe is now arriving for construction of a six-inch line from this point through the Kilgore field to Mid-Kansas Oil & Gas Company's W. P. Moore lease, W. Wiggins Survey, northeast of Overton, Rusk County.

Sinclair Topping Plant

Sinclair Refining Company is reported to be negotiating for a site and water supply near Camps to establish a crude oil topping plant that will operate from nearby producing leases of Sinclair Oil & Gas Company, and supply gasoline for the former's recently expanded gasoline gallonage throughout East Texas. Such a unit would enable Sinclair Refining Company to compete on even terms with the group of independent refineries in East Texas.

Damage Claims in Prospect

Filing of damage claims against violators of proration is now proposed by a number of East Texas lease owners whose properties have been exposed to excessive oil drainage by wells operated in violation of the Texas Railroad Commission's orders. Many operators have refused to join their neighbors in defying the proration rules, and in doing so have sustained heavy losses in potential oil recovery from prorated wells. In the event the police power of the commission withstands the court attack to be given a hearing at Austin on June 10, it is possible that an attempt will be made to restrict the output of wells that have violated proration since May 1 until the "overage" is made up. Some wells would be forced to remain idle beyond 1931 under such a rule.

More Sales Effort Required

Marketing of East Texas crude is requiring more sales effort by the numerous independent producers and brokers engaged in finding new buyers for the low priced oil since the slash in prices June 1 on Mid-Continent oils, and failure to book new contracts has resulted in some proration violators agreeing to restrict their production. Somewhat of a buyers' strike has been experienced by East Texas tank car rack operators during the past 10 days, but new life has been injected into the crude market through firm offers being made within the past few days at 15 and 20 cents per barrel loaded aboard cars. A few

sales involving immediate shipments are reported to have been made at less than 15 cents per barrel net to the producer.

Crude Buying Policies

Breakdown of the price structure in the East Texas district has resulted in Humble Oil & Refining Company cancelling its price posting effective June 3, but the company will continue to run and purchase outside oil, which will be paid for at 15-day intervals. The company has announced that its price will be an average of that prevailing in the district during the period of accumulation. The Texas Company was the first to withdraw its price schedule, having put the order into effect June 2, and at the same time discontinued buying. Magnolia Petroleum Company has not altered its buying policy and is paying the Mid-Continent schedule to all of its outside connections. Gulf Pipe Line Company is not connected to any outside properties.

More Proration Suits

Five new petitions were filed in district court at Austin during the past week by East Texas operators seeking injunctions against the Texas Railroad Commission's proration orders. The following were added to the long list now on record: K. E. Merren et al; Jim Pollard, T. W. Warner and W. J. Stone; Jenkins Brothers and Consolidated Oil Company; Robert Bowles et al; and Pilot Oil Company. The latter filed its petition through an attorney on June 3, but began abiding by proration on the same date after having flowed one or more wells near maximum capacity for weeks.

Simms Pays 25 Cents

Simms Oil Company reduced its posted price on East Texas crude effective 7 a. m. June 6 to a flat level of 25 cents per barrel since several of the largest major crude buyers in the district have elected to withdraw official postings, but pay for crude on an average scale of that used by all purchasers. The bulk of East Texas oil handled by Simms Oil Company is being consigned to Stanolind Oil & Gas Company, which in turn supplies the Destrehan, Louisiana, refinery of Mexican Petroleum Corporation.

New Refinery Crude contracted

Slack Petroleum Company, Tulsa, is reported to have contracted for 200,000 barrels of East Texas crude to be delivered by Pilot Oil Company as needed to the former's 2500-barrel capacity skimming plant now nearing completion on the Texas & Pacific Railroad at Camps, Texas. Deliveries will be strung out over a long period.

Start Delivery on Contract

F. & M. Drilling Company, P. O. Box No. 782, Houston, with a field office at Gladewater, Texas, has started deliveries on its 500,000-barrel crude sale to Atlantic Refining Company from producing properties in the Longview field. This large crude contract was made more than a month ago, and prior to the announced withdrawal of Atlantic Refining Company as a crude buyer in East Texas. F. R. Flannagan is president of the F. & M. Drilling Company. The company's tank rack on Texas & Pacific Railroad, near Camps, is being increased in size from 25 to 50 cars capacity. A four-inch line connects this rack with producing wells.

Arkansas Refinery Gets Crude

Ouachita Valley Refining Company, which operates a 2000-barrel daily capacity refinery at El Dorado, Arkansas, is reported to have contracted for 75,000 barrels of crude to be delivered via tank cars by Macmillan Petroleum Corporation at 25 cents per barrel. This contract was made prior to collapse of the East Texas price structure. Ouachita Valley Refining Company is also reported to have contracted to purchase 100,000 barrels of Joiner field crude from L. P. "Pink" Hammond et al, with delivery being made via the Atlas Pipe Line Company's trunk line system direct from the wells to the plant.

Purchasers Withdraw From Louisiana-Arkansas Fields

Shreveport, La.—Effective June 15, Louisiana Oil Refining Corporation (Cities Service), will buy no outside oil in the Homer and Haynesville, light fields and in the heavy Stephens, Arkansas, field. This company is taking daily about 500 barrels of outside oil in Homer, about 750 barrels in Haynesville, where the company in participating in a repressuring project and about 210 barrels in Stephens.

It is also reported that Atlas Pipe Line Company, will soon cease taking outside oil in Homer, amounting to approximately 500 barrels daily, and that Atlantic Oil Producing Company will cease taking outside oil in Haynesville and Stephens. In the former this company takes about 125 barrels of outside oil and about 500 barrels in Stephens. Louisiana Oil Refining Corporation and Atlantic Oil Producing Company are the only purchasers of Stephens crude, this field having a daily average of approximately 825 barrels. While no official comment was forthcoming from any of these companies, it is generally regarded that plentiful supplies of East Texas crude, the heavy severance tax in North Louisiana and lifting costs are the main causes for the contemplated action.

Shreveport Geologists Visit North Louisiana Salt Domes

Shreveport.—The Shreveport Geological Society visited salt domes in Bienville and Winn Parishes, both in North Louisiana, on its 1931 annual field trip, which left Shreveport in a special bus, June 6, returning June 7. The group was headed by S. C. Stathers, chief geologist for Standard Oil Company of Louisiana, president, and J. Y. Snyder, Shreveport geologist, past president of the American Association of Petroleum Geologists.

Others making the trip included: W. V. Jones, Exchange Oil Company; J. B. Preston, S. G. Gray, V. E. Bremer and G. W. Schneider, The Texas Company; R. H. Mayer and W. H. McCartney, William Barrett, Incorporated; H. E. Barnett and A. R. Mornhindey, United Gas Company; S. P. Borden, consulting geologist; G. O. Grigsby, Brokaw, Garner, Dixon and McKee; W. E. Hopper, Southern States Company; A. E. Oldham, Arkansas Natural Gas Corporation; W. C. Spooner, consulting geologist; P. C. Dunbar, Louisiana Conservation Commission; L. B. Smith, Arkansas Natural Gas Corporation; Paul Madden, Republic Oil Company, Tyler, Texas; C. C. Clark, United Gas Company; R. E. Heithecker, United States Bureau of Mines; S. A. Packard, Arkansas Natural Gas Corporation; Walter Kauenhowen, consulting geologist; D. N. Jolly, Federal Oil Company; R. B. Grigsby, Stanolind Oil & Gas Company; A. M. Lloyd, Sun Oil Company; Henry Cortes, Vacuum Oil Company, Houston, Texas; and A. L. Brown, University of Texas, Austin.

South Texas Field Developments

EARL POST, ***Staff Representative, San Antonio, Texas***

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Refugio County Wildcat Cores Favorable Sand

San Antonio, Texas.—Bonnie View Oil Corporation's Dammann 1, Refugio County, has cored six feet of sand at 4159-4165 feet, showing oil saturation.

The well is ratholing ahead from 3614 feet with a six-inch hole, upon the completion of which a drill stem test will be made.

The well is a rank wildcat located eight miles south and east of the nearest production in the Refugio field and is an old survey made in 1915 which extends through the Mud Flats location of the Saxet Oil Company near the Aransas River in San Patricio County and on between Gregory and Aransas Pass.

Two new producers reported from the Refugio field by the Moody Producing Company and both on the company's O'Conner lease. O'Conner 6 was reported flowing oil at the rate of 800 barrels daily from 6442 feet, and O'Conner 3 was reported flowing 400 barrels daily from 6416 feet.

Houston Oil Company's Wilson Heard 10, also in the Refugio field, topped the pay sand at 3468 feet and cored to 3655 feet and was preparing for a drill stem test May 8. This company's Rooke 6 has been drilled to 3705 feet and has casing set at 3678 feet and waiting on cement. This company's St. John 1 is preparing to pull the liner at 3714 feet.

United Production Company has made locations for two more wells in the Refugio field, the Fox 1-B, a semi-wildcat, and M. F. Lambert 4, which is an offset to the company's Fox 1-A, recently completed producer and which was last reported making around 1100 barrels daily. This company was drilling at 4345 feet on O'Brein 6. The same company's Helen Ryals 5 had casing set at 3649 feet and was waiting on cement while the same company's Wilson Heard 10 had cored eight feet of salt water sand at 3618 to 3626 feet and was coring ahead.

Mount Lucas Well Has Show At Shallower Depth

San Antonio, Texas.—Houston Oil Company's Cartwright 23, located in the Sandman Survey, 691 feet north and 30 degrees east of Cartwright 11, in Live Oak County, encountered sand at 3554 to 3565 feet, which showed for a possible good producer on drill stem test. It is in the Mount Lucas gas field.

The test showed 250 feet of oil in eight minutes and nine-inch casing has been set at 3550 feet. The company has small production below 5000 feet in the same field.

The Cartwright 23 showing is something entirely new, not only for Live Oak County, but for the section. All oil production that has been found in this territory anywhere has been in horizons considerably lower. Gas production in the Lucas gas field in which the new well is located is coming from the 2100-foot level. The sand is between 250 and 300 feet above the top of the Jackson. All the production in Bee County and other nearby areas is coming from the Jackson formation.

The oil in Cartwright 23 has a gravity of 24 degrees and is said to possess the rare anti-knock gasoline qualities that are found in the Mirando crude and the low gravity oil of the Refugio field. The oil is said to resemble the Refugio low gravity oil in many ways, and is said to possess high benzol equivalent.

Third Field in Luling Area In Prospect Showing Oil

San Antonio, Texas.—The third Edwards lime field in Caldwell County in the vicinity of Luling seems possible, as preparations are made to complete M. O. Rayor's Dunlop 1, three miles west of the town, toward the old Luling field. The well has the top of the Edwards at 2504 feet with the total depth at 2511 feet. Casing has been set on packing at about 2145 feet. Storage is now being erected and the well will be completed the latter part of the week.

Oil showings were evident in the Austin chalk and the Buda lime and the test will be of these formations as well as the Edwards.

After developing sulphur water in the Edwards lime at 2330-38 feet, Ralph Ogden et al are reported to be preparing to abandon O. S. Alexander 1, a wildcat eight miles southeast of Lockhart, also in Caldwell County.

Victoria County Gas Well In Process of Completion

San Antonio, Texas.—Slick Estate's McFaddin 1 in Victoria County is running liner and tubing again and is in the process of completion. It had a sand at 3502 to 3512 feet that showed for a big gasser on drill stem test.

Completion of the well as a producer would mean a three-mile extension of the McFadden field. On a drill stem test, the well showed a pressure of 650 pounds.

The Slick well is three miles north of the Lion wells, which are producing from 3740 feet, but geologists generally believe it is producing from the same horizon as the Lion wells.

Simpson Fell Oil Company's Levi 1, six miles northeast of the Slick well, is drilling around 4500 feet.

The Texas Company has rigged up for its third test in the southern part of Victoria County. The company's first test was abandoned as dry at 6610 feet. The second test resulted in a gas well at 2025 feet but this has been shut in since completion. McFaddin 3, the third test, is northwest of the gas well. This block is four miles west of the Lion field.

United Gas Company is drilling at 2000 feet in its McFaddin 4-A and expects to find the gas sand around 3700 feet. Houston Oil Company has started drilling in Conrad 1 and is down 1000 feet. Conrad 1 is in the north part of the county on the Beck salt dome.

Saxet Field Deep Prospect Drowned Out By Salt Water

San Antonio, Texas.—The establishment of another deep producing horizon in the Saxet field of Nueces County failed when the Saxet Oil Company's Dunn 8 tested about 100 barrels of fluid, 90 per cent salt water from 4277 feet. The well is located in the main field, being 1000 feet north of Dunn 7. The regular level of the field is around 4100 feet or shallower.

Two tests in the vicinity of the field found showings at slightly above 4800 feet. Houston Oil Company's Morgan 2, originally completed at 4095 feet, now being deepened, found three feet of sand at 4797 feet, which showed both oil and gas. It is now drilling at 4980 feet. L. L. Smith's Hunter 1, three-fourths of a mile east of the main field, got oil and gas in a sand cored at 4792 feet. It is now at total depth of 5110 feet.

Gulf Coast Oil Company is preparing to complete M. J. Harrel 1. It blew out on May 30, caught fire, destroyed the derrick and part of the rig before it could be controlled. The equipment from the Saxet Dunn 8 has been moved to the location for the work.

The Houston Oil Company's Harrel 2, which blew in wild on May 19 from a sand at 2725-40 feet, is still running wild.

Two Wells Underway in Lower Edwards Plateau, Kerr County

San Antonio, Texas.—Two more wells have been spudded in the lower Edwards plateau district. Evans and Gant's Love 2, in the southwest corner of section 1592, and Martin et al's Estelle Young 1, A. E. Bruce Survey, both in Kerr County, are making good headway. The Love well is one-half mile southeast of Evans and Gant's discovery well, and the Young test is five miles north of the discovery.

Sprinkle et al's Haby 1, in Real County, seven miles south of the Love test, is drilling at 2140 feet after passing through an oil showing at 1980 feet. Evans and Gant's Seiker and Mears 1, northeast of the Love test, is down 2200 feet and should be striking the sands soon.

Gant & Kilgore and Eastland Oil Company have drilled Dan Auld 1, Section 23, GCSD & RGNR Railway Survey, Real County, to 4007 feet, where it is shut down for orders. The well encountered a sand at 3795 feet and has been in that formation to the bottom of the hole. It showed some gas around 3900 feet. It is likely that the well will be deepened as a result of the showing obtained in the Nicks test in Schleicher County at 4006 feet recently.

Southwest Texas Bulletin Requires Second Edition

San Antonio, Texas. — An additional 100 copies of the Southwest Texas Oil Bulletin have been printed to meet an increased demand, according to the Southwest Texas Oil Scouts Association with headquarters in San Antonio.

The majority of the extra copies have gone to supply unfilled orders that have been coming in regularly since the appearance of the bulletin early this year. Large oil companies doing business in Southwest Texas and individuals and companies in other states, made the largest number of requests for the bulletin.

The bulletin carries complete information on the production, refining, transportation and other phases of the oil industry in the Southwest portion of the state. A complete history of field developments in the same section and geological and other scientific data are included in the bulletin.

State Enters Suit Against Waste of Gas in Pettus Area

San Antonio, Texas.—An alleged waste of gas by running a well on block 19, Pettus townsite, wide open since it was brought in August 31, 1930, is the basis of a suit filed in the Bee County District Court by the State of Texas, through Attorney General James V. Allred, against Slick-Seligson Incorporated.

Slick-Seligson Incorporated is a corporation chartered under the laws of Delaware and doing business in Texas under a permit.

One thousand dollars per day damages for each and every day since September 10, 1930, up to and including the day of filing and until the case is settled in court, is asked by the state.

San Antonio, Texas.—Another test is to be drilled in the White Point field of southern San Patricio County by United Production Company, which is now rigging up Mayfield 1, a semi-wildcat.

Saxet Oil Company has plugged White Point Development Company 4 back to 3305 feet, where it is making an effort to perforate the casing. It was drilled to a total depth of 5750 feet.

San Antonio, Texas.—Three strata of hard coal aggregating 53 feet in depth have been encountered at from 1879 to 1950 feet on the Cole Petroleum Company's Donato Benavides 4, near Pescaditio, 12 miles east of Laredo.

It has been known that great strata of cannel and other valuable coal underlies the entire section under and around Laredo and crops out at the cannel coal mines, 23 miles northwest of Laredo.

San Antonio, Texas. — Texas Petroleum Company's (Schimmel and Batts) Ferguson 1 in Bastrop County has been completed for about 10 barrels from 1690 feet in the Serpentine formation. Serpentine was topped at 1470 and has casing set at 1460 feet.

The well is located in the J. Doyle Survey, 1000 feet south of the Williamson 1, which recently opened a Serpentine pool 2½ miles southwest of the Yost pool and six miles north of the Lytton Springs pool.

San Antonio, Texas.—Penn Oil Company's Pollok 1, on the unitized block of acreage 15 miles east of here in Bexar County, has set casing at 1373 feet, top of the sand at 1380 feet. The total depth of the well is 1420 feet. The well, which is in the Rialls Survey, was bailing late Monday.

Gulf Coast Field Developments

JACK LOGAN, ***Staff Representative, Houston, Texas***

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Ninth Failure Recorded On San Felipe Prospect

Houston.—The San Felipe prospect, Austin County, one of the largest known salt domes in the Gulf Coast, recorded its ninth failure last week when Empire Gas & Fuel Company abandoned Kunze 1. This well, which set a new depth record for the prospect, was drilled to 7215 feet before being abandoned in shale.

The San Felipe prospect is located on the Austin-Waller County line in the John McFarland, S. F. Austin, and William Cooper Surveys. This is a geophysically discovered dome, located by Gulf Production Company in 1927. Top of the cap has been discovered at 3225 feet, although one of the wells on the southwest side of the dome hit cap rock at 4700 feet and salt at 4750 feet. The dome is being operated by Kirby Petroleum Company and Empire Gas & Fuel Company.

Kunze 1, located on the west flank of the dome, was located September 15, 1930. Jackson formation was drilled into around 6200 feet. No occurrence of possible oil-bearing sands were noted during the drilling of the test although several favorable shows were found in some of the other tests.

Two Barbers Hill Wells, Initial 3400 Barrels

Houston.—Barbers Hill registered two completions during the past week to increase its potential production a total of 3400 barrels. Humphreys Corporation brought in Anna Davis 1, Strip 6 of the Griffith League, on the north side of the field for 2500 barrels at 5323 feet. The well is flowing through eighteen thirty-seconds-inch choke, registering a pressure of 580 pounds per square inch.

The Texas Company's Winfree 3 on the west side of the fiield is making 900 barrels of oil daily at 5630 feet. This new producer is flowing 32 gravity oil through 1⅝-inch choke. E. H. Winfree 2 of The Texas Company missed making a producer when it came in flowing 800 barrels of fluid with 70 per cent salt water for a few hours last Friday. The well was allowed to flow through one-inch choke for about 20 hours until it went dead. Operators are preparing to pull the screen from 5622 feet to work the well over to try to make a producer of it.

Liberty County Wildcat With Many Records, Quits

Houston.—Humble Oil & Refining Company's McFaddin Trust 1, a rank wildcat located eight miles east of Big Hill prospect, Liberty County, has been abandoned at 7663 feet, the deepest test drilled in that county.

McFaddin 1 is located 230 feet south and 330 feet west of the northeast corner of the H. N. O. Survey, Section 34, 1½ miles west of Shell Petroleum Corporation's McFaddin prospect. No shows giving indication of possible production were encountered in drilling this test.

This test is remarkable in that it was drilled with the largest set-up ever used in the Gulf Coast. A 164-foot derrick was used on the job. This well is claimed to have been the deepest test ever drilled using six-inch drill pipe, the deepest ever drilled with a gasoline motor; the deepest 12-inch hole and the longest string of 12½-inch casing ever set in a well.

The second test to be abandoned in Liberty County during the past week is The Texas Company's Pipkin 4, located at Big Hill. This test is located on the southeast flank of the dome. The test was started September 15, 1930, and was abandoned June 1, at 5910 feet in shale.

Pipkin 4 is the fifth well drilled by The Texas Company on this dome and although a small amount of oil has been found in some of the tests, no commercial production has been established in the field.

Second Test Starting in Northern Liberty County

Houston.—Ingram Petroleum Company's location of a second test in the immediate vicinity of Cleveland, Liberty County, has caused some bit of interest to be centered in that particular territory. The new test, Fenner 1, in the C. T. Palmer Survey, 600 feet east and 1500 feet west from the southwest corner of the Fenner tract.

The first test of J. R. Ingram, Hornbeck 1, was drilled to 5633 feet before it was abandoned in shale March 1, 1931. Top of the Jackson was discovered in this test at 4023 feet. Hornbeck 1 was located two miles south of Cleveland, in the Clayton Harper Survey.

Machinery for Fenner 1 has been moved onto the location and the well is being rigged up for spudding in about the last of the week. This test has been protected by the purchase of further leases of 350 acres including other lands in the Palmer Survey.

Houston.—Standard Oil Company of Louisiana has encountered the third show of oil in Gay 1 at Bayou Choctau, Iberville Parish, and is preparing to make a test of the formation at 4328 feet.

A slight show of oil in gumbo at 2900 feet failed to justify a test and the well was drilled to 4174 feet where several tests were made of the shows encountered at that level. Bailing tests and swabbing failed to make a producer of the well and it was sidetracked at 4113 feet. Drilling continued to 4304 feet where the third sand was picked up and was penetrated to the present total depth of 4328 feet.

Wilbert 9 of the same company in the Bayou des Glaise area, Iberville Parish, cored formation at 3384 feet and is now drilling in sandy lime at 3830 feet. Schwing 6 in the Bayou Blue field is down 1500 feet in gumbo.

Houston.—Sun Oil Company completed two small producers during the past week in the Gay Hill field, Washington County, for a total of 75 barrels. Carroway 5 came in for 35 barrels at 1380 feet while Janner 5 was completed after 29 feet of 4¾-inch screen had been set at 1215 feet. The well has been put on pump and is making 40 barrels daily.

Louisiana--Arkansas Field Notes

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Urbana District Producer Makes 170 Barrels Clean Oil

Shreveport.—Marine Oil Company's Union Sawmill 1, SE SE Section 3-18-13, in the Urbana district of Union County, Arkansas, was completed last week flowing 170 barrels of clean oil by heads daily from 3551 feet, through three-inch tubing. Seven-inch casing was cemented at 3532 feet.

Modisette and associates, drilling a wildcat in Columbia County, south Arkansas, abandoned Sharklee 1, SW NE Section 33-16-19, as a dry hole at 2356 feet in sandy shale. Nacatosh sand was topped at 1932 feet.

Lion Oil Refining Company and associates' Guy P. Hayes A-9, SW NE Section 4-16-15, Union County, Smackover's first 5000-foot test, last week was in hard blue sandy shale at 3865 feet.

Core Nacatosh Sand in Test Eight Miles North of Zwolle

Shreveport.—Eight and one-fourth inch casing was cemented during the past week at 1590 feet, elevation being 232.7 feet, in J. J. Kean's Belton 1, SE SW NE Section 31-9-13, Sabine Parish, eight miles north of Zwolle production where a 10-foot core showing oil was taken from 1590 to 1600 feet. The upper six feet of the core has been identified as Nacatosh sand, which in the majority of chalk rock and marl producing wells in Zwolle does not appear. The latter four feet was marl. Chalk and marl production in Zwolle is found at 2200 to 2700 feet.

Three miles north of Zwolle east field production Sabine Royalties Company, drilling the second of a series of three tests, abandoned the hole as dry in the Zwolle chalk at 2654 feet. This test was Skinner 1, SE SW NE Section 5-8-11.

Gulf Starts Second Test on East Flank of Sabine Uplift

Shreveport.—Drilling the second of a series of tests in the vicinity of the southeast flank of the Sabine Uplift, Gulf Refining Company during the past week, started rigging up for Bodcaw A-1, NE SW Section 4-10-5w, Winn Parish.

In east central Louisiana, Nick Babare announced location for Mutual Realty Company 1, Section 36-11-9e, Tensas Parish. In the same general section of the state United Gas Public Service Company abandoned Hughes 1, Section 49-8-10e, Concordia Parish, as a dry hole at 1740 feet. A drill stem test at the base of the Jackson where several interesting gas shows in that area have been obtained and where one small commercial gasser was completed several months ago, was dry. This test was made at 1482 feet.

Jackson, Mississippi.—It is reported here that the seismograph crew of the Geophysic Research Corporation working in Jackson County, southeast Mississippi, with Pascagoula as a base, is doing this work under contract for the Stanolind Oil & Gas Company. The crew has been engaged in that area for several weeks.

One Completion, Two Locations Week's Record in Jackson Area

Jackson, Mississippi.—One gasser and two new locations comprised the majority of activity in the Jackson gas field last week. The field continues quiet. Grandstaff and associates' Carr 1, NW SE Section 12-5-1e, Rankin County, in the southeast part of the Jackson field, was completed in chalk at 2391 feet, making an estimated yield of 45 million cubic feet. Elevation is 270 feet. Black shale was topped at 2304 feet and chalk at 2384 feet. The well is regarded as large as any completed in the Jackson area.

Square Deal Oil & Gas Company erected derrick for Spann 1, SE NE Section 13-5-1e, Rankin County, and Union Drilling Company has derrick up for Pate 1, NE SE Section 12-5-1e, Rankin County.

M. M. Stokes has materials on the ground and is moving in rig for School Land 1, Section 14-10n-2w, Jefferson County, southwest Mississippi.

United Gas Company to Take Over More Southern Gas Line

Jackson, Mississippi.—Unconfirmed reports current here are to the effect that United Gas Company is planning to take over more of the Southern Natural Gas Corporation's Monroe, Louisiana-Atlanta, Georgia, trunk gas line and that Jackson field gas will be used for this main line, increasing the pull from the local field to approximately 35 million cubic feet of gas daily. At present approximately 15 million cubic feet are being used for the Mobile, Alabama, lateral which branches off from the trunk line at Pickens, Mississippi.

Late last week, R. E. Dalton Development Company erected derrick for Majure 1, SE SE Section 25-6n-11e, Newton County, 60 miles east of Jackson. The location is just outside the town limits of the town of Newton.

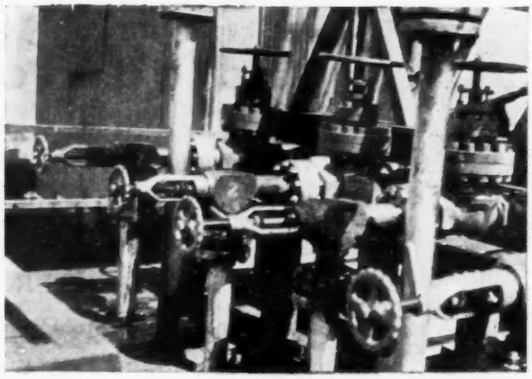
Shreveport.—Two gas producers were completed during the past week in the Richland Parish field. Palmer Corporation's Clements 1, Section 10-16-6e, gauged 20,520,000 cubic feet with 385 pounds rock pressure at 2490 feet. United Gas Public Service Company's Earle 4, Section 1-16-5e, gauged 3,131,000 cubic feet of gas with 830 pounds of gas at 2465 feet. This well had been deepened from 2391 feet.

Arkansas-Louisiana Pipe Line Company made location for McEnery 6, Section 29-19-4e, Ouachita Parish, Monroe district.

Houston.—Reports from various sources in the Houston territory indicate the possibility of Standard Oil Company (Indiana) entering the Gulf Coast district through the Pan-American Petroleum & Transport Company with a large export terminal and tank farm or a refinery on the Houston ship channel. It is said that the parent company is negotiating for a 1000-acre tract on the ship channel. This acreage does not adjoin the holdings of the Crown Central Petroleum Company, which was recently acquired by the American Oil Company (Blaustein interests of Baltimore) which is partially owned by Pan-American Petroleum & Transport Company.

smooth flow for high pressures

A Kettleman Hills installation showing 4 of the 7 Shaffer Adjustable Flow Beans in the Christmas Tree.



In the New EAST TEXAS FIELD, AS IN ALL OTHER FIELDS, SHAFFER FLOW BEANS

are outselling all other makes

This device controls the flow of oil and gas from a well, throttling it to any desired pressure and rate of flow. The simple hand-wheel control permits minute adjustments without disturbing the current of oil and gas coming through the flow lines. The venturi tube construction (which is controlled by our patents) insures the smoothest possible flow. It is extremely strong and the gauge is easily read. The most popular high-pressure valve for controlling the world's biggest producers. Made in six standard sizes: 6-inch, 4-inch, 3-inch, 2½-inch, 2-inch and 1-inch.

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OKLAHOMA CITY
Fluid Packed Pump Co., Mid-Continent
HOUSTON—Robt. J. Miller Co.
FOREIGN—Oilwell Supply Co.

SHAFFER *adjustable* FLOW BEAN

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but they didn't know what Puddled Iron can do!

IN the Greater Seminole Area, Reading Puddled Iron Tubing proved it could go to depths of 4,200 and 4,600 feet and *stay in the hole longer* than any other tubing.

Yet some folks said that Reading Tubing couldn't go deeper.

Then along came the Oklahoma City Pool. In a desperate effort to find tubing that would stand up, operators turned again to Reading. In one well, Reading Puddled Iron Tubing was successfully run to a depth of 6,600 feet . . . and since then has proved that it can do jobs like this again and again! The problem was *solved*—by *Reading*.

Operators have now learned by experience that Reading Tubing—with its inherent strength and toughness, its double welding, forged couplings and perfect threads—licks deep well tubing troubles and *keeps* them licked. Insist on getting Reading Puddled Iron Tubing, marked by the indented spiral.

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Proration Generally Observed In Texas and New Mexico Fields

Fort Worth, Texas.—Production restrictions are being adhered to generally in all prorated fields in Texas and New Mexico despite the opposition offered by a large group of operators and companies in East Texas. A harmonious program of curtailment is being followed by operators, except in the new disturbing area, and from a few properties in the Texas Panhandle, where injunction suits of long standing have hindered rigid enforcement of the Texas Railroad Commission's rules.

East Texas is conceded to have surpassed all single producing areas on potential production with 720 wells completed at the start of the June period. Open flow potentials are not used in East Texas, but with the use of small chokes and 2½-inch tubing it has a daily potential of more than 1,500,000 barrels daily, while actual open flow potential is probably four times such a figure. In view of the fact that so many operators are violating proration the current production is averaging about 500 barrels daily per well, while proration quotas for the first period in June provides for an average production of less than 250 barrels daily per well.

Van field was the only systematically prorated area in Texas and New Mexico to be awarded production allowance increases in June, and the advance of Van's allowable from 45,000 to 50,000 barrels daily was made in compliance with authorization given earlier in the year. This major oil field will remain at the 50,000-barrel level for an indefinite period.

Comparative data on the various prorated fields in the two states is shown in the accompanying table.

Latest Proration Data on Texas-New Mexico Fields

	No. Wells	Official Daily Pot'l Production	Maximum Daily Prod. Allowance	Percentage of Pot'l Prod. Allowed	Daily Average Yield Per Well
TEXAS PANHANDLE—					
Gray County	763	94,753	27,049	28.55	35.45
Hutchinson County	864	27,533	8,607	31.26	9.96
Carson County	242	11,383	3,171	27.86	13.10
Moore County	20	2,920	948	32.47	47.40
Wheeler County	43	673	223	33.14	5.19
Potter County	1	7	2	28.57	2.00
Total	1,933	137,269	40,000	29.14	20.69
WEST TEXAS—					
Yates	400	5,507,436	70,000	1.27	175.00
Crane-Upton	594	51,068	18,445	36.12	31.05
Howard-Glasscock—					
3000-foot wells	93	14,376	6,494	45.17	69.83
2500-foot wells	53	10,465	4,333	41.40	81.75
2200-foot wells	85	40,456	15,706	38.82	184.78
1800-1300-foot wells	302	7,932	4,573	57.65	15.14
Total	533	73,229	31,106	42.48	58.36
Ector County	80	37,324	5,855	15.69	73.19
Winkler County	518	96,559	48,000	49.71	92.66
NORTH TEXAS—					
New Castle district	169	11,456	5,155	44.99	30.50
N. Tex. dist. (misc'l)	15,006	81,000	51,352	63.39	3.42
CENTRAL EAST TEXAS—					
Van	244[1]	474,806	50,000	10.53	204.92
Kilgore	314[2]	741,876	60,000	8.09	191.08
Joiner	296[3]	555,229	65,000	11.71	219.59
Longview	110[1]	257,217	35,000	13.61	318.18
SOUTHWEST TEXAS—					
Darst Creek	260	140,325	20,000	14.25	76.92
Salt Flat	330[4]	18,223	12,765	70.05	38.68
Pettus	19	6,102	4,500	73.74	236.84
NEW MEXICO—					
Hobbs	143	1,148,920	37,040	3.22	259.02
Eunice	8	.....	400	....	50.00

[1]Potential via 11/16-in. choke on 2½-in. tubing only.
[2]Potential via ¾-in. choke on 2½-in. tubing only.
[3]Potential via open tubing flow.
[4]Effective 3-14-31 to 9-14-31.

Houston.—Gulf Refining Company has opened the shallowest producing level in the Starks field, Calcasieu Parish, as a result of completion last week of Lutcher-Moore 27 for an initial flow of 40 barrels at 500 feet.

Commercial producing levels in the more shallow sands heretofore have ranged all the way from 600 to 1200 feet while the deep production has come from the 4200-foot level.

An effort was made to bring in Lutcher-Moore 27 just above the top of the cap rock, which was penetrated at 1278 feet, but a test at this depth showed salt water and the well was plugged back to make a test of the sand at the 500-foot level.

This producer is located on the north side of the dome, 1165 feet south and 610 feet east of the northwest corner of the southeast quarter of Section 19-9s-12w.

Deterding Analyzes World Situation

(*Continued from page 28*)

ment to an end, the Steaua Romana gave notice to the agreement, and thus conservation came to an end on December 1st, 1930. Immediately a very considerable overproduction set in, . . . "

Roumanian production and price figures are quoted in contrast to American statistics showing "clearly that the loyal producers in America did what they could do to improve the statistical position of the oil industry. They took a heavy burden upon themselves in curtailing production so much and the effect was that they indeed succeeded in improving these figures, although consumption did not increase to the same extent as in former years, owing to the world crisis."

"There is, therefore, no reason at all for any feeling of panic in regard to over-production in America. Not only is pessimism out of place in regard to the petroleum industry—the greatest supplier of energy in the world—but there is also too marked a tendency to show insufficient interest in and to pay too little attention to the earnestness with which the leaders of that industry apply sound ideas in practice."

Referring to cooperation in America, specifically at Kettleman Hills:

"We have every reason to expect that in the interests of the whole American petroleum industry this association will tend to counteract large fluctuations in a possible decline of production elsewhere and at the same time prevent this large reserve being misapplied to make the over-production still greater, so that if ever a large decline elsewhere should lead to too high prices it will be possible to meet all demands at a reasonable price. There are already signs that this good example of cooperation [at Kettleman Hills] will be followed up.

"But even if production were in fact to assume the greatest imaginable proportions, say twice or more than twice the present production, still this would not be so alarming for the petroleum industry as for the coal industry. At the moment the production of coal is still 1,200,000,000 tons. If the production of petreloum were to be doubled or even more, then fuel oil would become so cheap that coal would be ousted almost entirely and would have to give place to say 600,000,000 tons of oil. But the possibility of the present oil production being doubled in the near future is to be considered as practically precluded. It is to be regretted, however, that so many in the oil industry do not realize that every over-production, great or small, has the same effect; in other words, no matter whether the over-production is 10 per cent or 50 per cent the result is the same: the market is unable for the time being to absorb the surplus and prices fall very low."

INTERNATIONAL PETROLEUM IN REVIEW

The temples belong to the great god Buddha, the wells to Burmah Oil Company. Scene on the Irrawaddy River, Upper Burma.

English Comment on Senator Borah's Outburst

"Like many other politicians who desire to create a stunt, this remark of Senator Borah ('proration a method of despoiling the public') shows that he is very imperfectly acquainted with the subject he is dealing with. . . .

"If the oil consumer has not benefitted to the full extent he might have expected from the low prices of crude oil, it is because gasoline has been made artificially dear by state taxation and thus by the action of the politicians themselves. In view of this fact it is farcical and hypocritical on the part of politicians to ape anxiety for the protection of oil consumers whom hitherto they have been foremost in exploiting through taxation.

"In many of the States of the Union the tax on gasoline about equals or exceeds the refinery price, and there is a growing tendency in State legislatures to add to the tax, especially in view of the cheapness of motor fuel.

"A favorite recreation of this type of politician is seeking to unearth a scandal of some kind; the fact that the plots against the public welfare which they profess to have discovered so often turn out to be 'mares' nests' does not seem to deter them from this kind of activity. A less blatant set of individuals would be chastened by the repeated bursting of the sensation bubbles sent up, but not so the politicians in search of a stunt. This class of individuals is not peculiar to any country; we have many of them here.

"Returning to the question of exploiting the oil consumers, there can be little doubt if ever they needed protection it is not today, especially in the United States where competition among the different interests vending gasoline has brought down retail prices to absurdly low levels, to say nothing of the extensive services that many sellers give their gasoline customers quite free of charge. In recent years the petroleum industry has undoubtedly done well for the oil consumer if it has done very badly for itself.

"Its survival in a reasonably healthy condition is a national necessity, . . . If Senator Borah wished to indict the oil industry for unduly exploiting the oil-consuming public, he could scarcely have hit upon a less favorable moment for the purpose, because all the current facts point in a precisely opposite direction."—*Petroleum Times,* London.

Creole Transferred to Eastern Venezuela

The general staff of Creole Petroleum Corporation, Venezuelan subsidiary of Standard Oil Company of New Jersey, has been transferred from Punta de Leiva, a lake-shore site near Maracaibo, to new camps recently constructed at Caripito and Quirequire, in eastern Venezuela.

Withdrawals from the Maracaibo Basin to the company's new operating base in eastern Venezuela have been gradual during recent months; but the transfer is now virtually complete. This, of course, is the logical result of the coincidence of failure to develop commercial production in the Basin with success in the eastern area.

It appears, however, that operations in the western sector are not to be abandoned, as a new wildcat test has been commenced in the District of Zamora, and a small organization is to be left in the Maracaibo district. Creole Petroleum Corporation's operations in the latter district have not been completely abortive, as oil has been found in small quantities on both sides of the lake.

Completions for Past Week in U. S. Fields

▼ ▼ ▼

CALIFORNIA

Company, Well and Location	Initial Production Bbls.	Depth
KETTLEMAN HILLS—		
Standard Oil Co., Fee 21-33J	14,000	7952
PLAYA DEL REY—		
Herndon Pet. Co., No. 2	2500	6188
ROUND MOUNTAIN—		
Chanslor-Canfield Midway Oil Co., Mon 2, 26-27-28	200	1560
VENTURA AVENUE—		
Associated Oil Co., V. L. W. 15	1000	7840

PENNSYLVANIA

Company, Well and Location	Initial Production Bbls.	Depth
BRADFORD FIELD—		
E. C. Tanner Co., Griffith 1	7	....
Healey Petroleum Corp, Healey 26	2	....
South Penn Oil Co., Melvin 294	2	....
CLARION-VENANGO FIELD—		
Fryburg Motor Co., Kapp 5	¶½	....
J. H. Sheffer, Sheffer 1	3	....
United Gas Co., Swab 1	¶½	....
BUTLER COUNTY—		
Smith & Co., Smith 1	2	....
CENTER-MIDDLE FIELD—		
Yerdon & Co., Kapp 1	4	....

NEW YORK

Company, Well and Location	Initial Production Bbls.	Depth
ALLEGANY COUNTY—		
R. & R. Oil Corp., Ryder 1	3	....
Bank of Olean, Childs 4	7	....
Grow Farm Oil Co., Grow 1	*	....

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
BOONE COUNTY—		
J. V. Reishman, Dent 1	¶¼	....
Pure Oil Co., L. Sutphin 4	¶1	....
Federal Coal Land 50	¶¼	....
Federal Coal Land 51	¶1½	....
Miller & Lang, Anderson 4	¶1	....
KANAWHA COUNTY—		
Ten Mile Oil & Gas Co., Dickinson 11	¶½	2486
United Fuel Gas Co., Sunday Creek Coal 4268	¶1	....
Winifrede Co., Fee 7	¶¼	....
Fee 8	¶¼	....
Fee 15	¶¼	....
WOOD COUNTY—		
John Leeten & Co., Lemley 1	3	....
WAYNE COUNTY—		
C. C. Wolfe, Adkins 1	¶¼	3148
PLEASANTS COUNTY—		
Dinsmore & Co., Smith 2	2	578
PUTNAM COUNTY—		
United Fuel Gas Co., Rogers 4121	¶¼	5080
GILMER COUNTY—		
McCall & Co., Moore 1	¶¼	2207
Clem Morris & Co., Roberts 1	¶¼	1990
RITCHIE COUNTY—		
Godd & Woodward, Goffield 1	¶2	....
CABELL COUNTY—		
General Gas Co., Kinnard 1	¶¼	2460
ROANE COUNTY—		
United Fuel Gas Co., Vinyard 1645	*	5011

SOUTHEASTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
WASHINGTON COUNTY—		
T. M. Curtis, Biehl 9	*	850
A. E. Pryor, Palmer 1	*	....
R. L. Wright, Holsher 2	*	1154
NOBLE COUNTY—		
G. H. Clymer & Co., Masters-Wharton 1	*	1870
Femrick & Co., Wells 1	¶¼	1917
MORGAN COUNTY—		
The Kemrow Co., Abel 2	¶¼	1624
MONROE COUNTY—		
Day Oil & Gas Co., Burkhart 2	¶¼	2047

CENTRAL OHIO

Company, Well and Location	Initial Production Bbls.	Depth
STARK COUNTY—		
Medford Oil & Gas Co., Firestone 2	¶½	4390
East Ohio Gas Co., Fawcett 1	¶1¼	4249
Brendall & Co., Lake Cable 2	¶1¼	4384
COSHOCTON COUNTY—		
Preston Oil Co., Frazee 1	9	3228
Griffin 1	*	3295
PERRY COUNTY—		
Mid-East Oil & Gas Co., Brown 2	¶¼-80	....

For Tabulation and Comparison See Market Section

Company, Well and Location	Initial Production Bbls.	Depth
ASHTABULA COUNTY—		
Beeghley-Schaffer Oil & Gas Co., Maki 1	¶2½	2750
MUSKINGUM COUNTY—		
Ohio Fuel Gas Co., Hale 1	¶¼	....
TUSCARAWAS COUNTY—		
Local Oil Co., Weaver 2	¶1¼	2905
FAIRFIELD COUNTY—		
City Natural Gas Works, Schall 4	¶¼	2462

NORTHWESTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
HENRY COUNTY—		
Lake Shore & S. W. Oil & Metal Co., McKinney 1	¶¼	1700
OTTAWA COUNTY—		
Sugar Creek Oil Co., Klingbiel 1	2	....
SENECA COUNTY—		
Tiffin Industrial Gas Co., Flechtner 5	¶¼	....
Sandusky Gas Co., Hostler 1	¶¼	....
SANDUSKY COUNTY—		
Cessna-Feasel, Inc., Baker 1	*	....

INDIANA

Company, Well and Location	Initial Production Bbls.	Depth
PERRY COUNTY—		
Conyers, Bugg & Co., Adlers 3	350	364
Cassidy 4	25	....

ILLINOIS

Company, Well and Location	Initial Production Bbls.	Depth
CRAWFORD COUNTY—		
O. R. Oil & Gas Co., Smith 2	*	....
Phipps, Cawood & Co., Laughead 1	*	....

KENTUCKY

Company, Well and Location	Initial Production Bbls.	Depth
HART COUNTY—		
H. Z. Clark, Wilson 1	100	650
Wilson 2	100	647
J. B. Miles & Co., Smith 1	*	....
OHIO COUNTY—		
Cumberland Petroleum Co., Wade 12	50	....
C. M. Root, Steele 14	60	....
CLAY COUNTY—		
Petroleum Exploration Co., Allen 1	¶-¼	....
KNOX COUNTY—		
Petroleum Exploration Co., Allen 1	¶1¼	....
Jellico Land Co. 5	¶2	....
BELL COUNTY—		
T. J. Asherm Hemminger 2	¶1½	....
HANCOCK COUNTY—		
Hupp, Duff & Co., Beling 1	*	....

MICHIGAN

Company, Well and Location	Initial Production Bbls.	Depth
ISABELLA COUNTY—		
Isabella Oil Development Co., Keeler-Mitchell 3	¶5½	1350

KANSAS

Company, Well and Location	Initial Production Bbls.	Depth
COWLEY COUNTY—		
H. R. Allen et al, Bice 1, ne c sw 29-30-6e	*	3532
ELLSWORTH COUNTY—		
Gilmore Oil Co., Sturm 1, nw c sw 31-17-9w	*	3295
McPHERSON COUNTY—		
Lario O&G and Shell, Lagree 2, se c nw 31-19-1w	3160	2923
Lagree 1, nw c, 31-19-1w	3500	3409
Suffield 1, se c 25-19-2w	2710	3396
McPherson O&G Dev. and Shell, Salthouse 3, c se se 15-19-2w	¶3½	2936
Decker 3, c se ne 11-19-2w	50	2897
RENO COUNTY—		
Shell and Continental, Blake 1, sw se se 23-23-4w	¶9¾	3266
RICE COUNTY—		
Muth Bros. et al, Freeman 1, se c 4-21-6w	240	3430
SEDGWICK COUNTY—		
Fisher and Lauck, Sanders 1, ne nw sw 1-28-1e	*	3458
STEVENS COUNTY—		
Argus Prod. Co., Greenwood 1, c ne 11-34-38w	¶6	2675
Texas Interstate Pipe Line Co., Johnson 1, c nw 6-34-37w	¶6	2750

OKLAHOMA

Company, Well and Location	Initial Production Bbls.	Depth
BECKHAM COUNTY—		
McFann and Price, Webster 1, c sw sw 34-8n-25w	¶1½	1890
CARTER COUNTY—		
Amos Drlg. Co., Sparks-Hooks 1, se c 13-1s-3w	610	1987
LEFLORE COUNTY—		
Sooner O&G, Clyman 1, csl ne nw 28-7-26e	¶¾	1700
LINCOLN COUNTY—		
Slick Estate, Fee 2, se c sw 7-14-4e	835	4975
MARSHALL COUNTY—		
Otto Reynolds, Rice 1, sw c se se ne 36-5s-5e	*	350
McINTOSH COUNTY—		
J. S. Routt, Eckols 2, c nw se 10-11-15e	¶2	1034
MUSKOGEE COUNTY—		
Braman Oil Co., Jackson 5, sw c se nw 17-13-16e	¶3	1080
Mack Drlg. Co., Richards 6, se c ne se ne 33-16-15e	¶6½-7	1240
OKLAHOMA COUNTY—		
Courter Oil Co., White 1, nw sw nw 10-11-3w	2290	6435
I. T. I. O. et al, Terrace Lawn 2, ne nw ne 10-11-3w	8270	6305
Wirt Franklin Oil Corp., Schilling 1, ne se sw 10-11-3w	12,270	6395
Phillips Pet. Co., McBeth 1, nw se ne 10-11-3w	10,205	6312
Watchorn O&G, Traders Compress 1, nw c se se 34-12-3w	8165	6281
OKMULGEE COUNTY—		
Denton and Marshall, Delano 1, ne c nw 5-14-14e	*	1708
Iverson et al, Rentie 1, cnl ne sw 14-14-12e	*	2164
PITTSBURG COUNTY—		
Utilities Prod. Co., Carney 3, cnl ne nw 9-7n-18e	¶11	1712
Vail 2, ne se se 8-6n-18e	¶10	1722
SEMINOLE COUNTY—		
Magnolia Pet. Co., Powell 1, nw sw se 15-6-7e	*	4634
TULSA COUNTY—		
Owens et al, Warner 3, sw c se sw 33-18-14e	40	1485
Chandler and Day, Shields 1, ne c se 20-19-14e	*	1330

NORTH LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
RICHLAND PARISH—		
Palmer Corp., Clements 1, 10-16-6e	¶20½	2490
United Gas Pub. Serv. Co., Earle 4, 1-16-5e	¶3¼	2465

MISSISSIPPI

Company, Well and Location	Initial Production Bbls.	Depth
RANKIN COUNTY (Jackson Dist.)—		
Grandstaff et al, Carr 1, 12-5-1e	¶45	2391

LOUISIANA GULF COAST

Company, Well and Location	Initial Production Bbls.	Depth
EVANGELINE—		
Kathleen Oil Co., Syndicate Clements 3	120	1750
STARKS—		
Gulf Ref. Co., Lutcher-Moore 27	40	500

TEXAS GULF COAST

Company, Well and Location	Initial Production Bbls.	Depth
BARBERS HILL—		
The Texas Co., Winfree 3	900	5630
BIG HILL—		
The Texas Co., Pipkin 4	*	5910
COLORADO COUNTY—		
United North & South Dev. Co., Lockwood 1	*	5585
GAY HILL—		
Sun Oil Co., Janner 5	40	1215
Carroway 5	35	1380
JEFFERSON COUNTY—		
Humble O & R Co., McFaddin 1	*	7663
MOORES FIELD—		
Gulf Prod. Co., Moore 29	400	4169
SAN FELIPE—		
Empire G. & F. Co., Kunze 1	*	6555

SOUTH TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
BASTROP COUNTY—		
Texas Pet. Co.'s Ferguson 1	10	1690
BEXAR COUNTY—		
Penn Oil Co.'s Pellok 1	*	1420
NUECES COUNTY—		
Saxet Oil Co.'s Dunn 8	*	4277
REFUGIO COUNTY—		
Moody-Seagraves Producing Co.'s O'Conner 6	800	6442
O'Conner 3	400	6416

WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
HOWARD COUNTY—		
Merick & Lamb, Otis Chalk 1	185	1835
IRION COUNTY—		
W. E. Newton et al, H. Horney 1	*	1602
JONES COUNTY—		
Union Oil Co. (Nevada), Hoyt 1	*	2104
LOVING COUNTY—		
Lockhart & Co., I. J. Bell 1	475	4263
West Texas Pet. Co. (Eppenauer), Allen 2	180	4311
TAYLOR COUNTY—		
Adams-Ferguson & Hobbs, Lowe 3-A	¶1½	2404
WARD COUNTY—		
Alpine Oil & Dev. Co., Boogher 3	25	2234
Bell & Weir, Boogher 1	25	2255
Clyde Bradford et al, Hordage-Wilson 1	35	2475
Gulf Prod. Co., O'Brien 17	¶2½-65	2706
Peck et al, Geo. Merritt 1	35	2220

TEXAS PANHANDLE

Company, Well and Location	Initial Production Bbls.	Depth
GRAY COUNTY—		
H. H. Sanders et al, J. E. Wright 1	205	2814
HUTCHINSON COUNTY—		
H. Stekol et al, Whittenburg 4-B	125	3043
MOORE COUNTY—		
Plains Holding Co., Lee Bivens 2	¶46½	2550
The Texas Co., D. C. Jester 1	¶12	2996

NORTH TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
ARCHER COUNTY—		
Lincoln et al, Carr 1	*	1448
Kelly et al, Churchwell 1	*	1354
Perkins-Cullum et al, Falls Co. fee 1-A	30	1122
Falls Co. fee 1-C	15	1175
Falls Co. fee 1-D	50	1165
Petroleum Producers Co., Prideaux 1	*	775
Steele Drlg. Co., Lauster 1	*	1410
COLLIN COUNTY—		
Roy I. Carter et al, Malone 1	*	2675
JACK COUNTY—		
Wayne H. Hammon et al, Booth 2	40	2918
NORTH YOUNG COUNTY—		
T. F. Hunter et al, Dietrich 1	*	1175
Knox et al, Bernhardt 1	*	1052
Luray et al, Eddleman 1	*	1341
Sparks et al, Campbell 4	8	892
Wootten & Reed, McBrayer 1	*	705
SOUTH YOUNG COUNTY—		
Cox-Henderson et al, Daws 1	*	800
Stauffer & Moore, Johnson 1	*	300

CENTRAL WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
BROWN COUNTY—		
Farrish et al, Fields 1	*	780
Mystel et al, Guyer 2	*	1105
COLEMAN COUNTY—		
Arcadia Ref. Co., Golson 10	100	1630
Anzac Oil Corp., et al, Martin 1	*	1575
F. A. Lane et al, Kellar 1	*	1583
Texas-American Synd., Newton 4	*	2000
EASTLAND COUNTY—		
Cooper et al, Cooper 1	*	900
Southern Oil & Prod. Co. et al, Gamblin 1	15	3505
PALO PINTO COUNTY—		
Brazos River Gas Co., Edmondson 18	*	1133
SHACKELFORD COUNTY—		
Corzelius Bros. & Terry, Flippen 1	*	960
A. A. Hutton et al, Isbell 1	20	684

CENTRAL EAST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
JOINER FIELD—		
Bass et al, Alford 1	4000	3780
British-American Oil Prod. Co., Kangerga 1	7000	3643
Kangerga 2	5000	3661
Davenwood Oil Co. (Baldwin-Sultan) Mullins 1	5000	3794
Edwards & Hall, Thrash 1	1500	3747
Golding-Murchison Oil Co., M. L. Thompson 2	5500	3710
C. Young (63-ac) 1	3000	3727
C. Young (63-ac) 2	4000	3699
Gulf Prod. Co., Keeling 1-A	3500	3776
E. E. Thrash 4	3400	3759
Gulf-E. L. Smith Oil Co., Wm. Stone 1	4000	3822
W. B. Hamilton-Consolidated-Jenkins, Jobe 4	330	3577
Humble O&R Co., Walker 1	10,000	3701
Wilson 1	8000	3708
H. L. Hunt et al, R. F. Russell 1	5000	3780
Judd et al (W. E. Stewart), Giles 1	2000	3748
Kirby Pet. Co., Wm. Stone 1	5500	3655
Magnolia Pet. Co., Roy Loosier 1	5500	3672
C. B. Mitchell et al, Ras Pool 1	15,000	3724
A. W. Phillips Oil Operators, J. B. Wilson 1	10,000	3680
Sinclair Oil & Gas Co., Patterson 1	1000	3671
R. G. Wright 1	5000	3711
Valentine Smith et al, Wm. Stone 1	4000	3822
Snetcher & Pittman, Cox 2	7500	3780
Southern Interstate Oil Co. (was Beard-Hammond), Giles 1	3000	3714
Sun Oil Co., J. J. Denton 1	6000	3698
A. V. Ritch 1-A	4500	3669
Tidal Oil Co., H. M. Hale 1	3600	3667
Tulsa Oil Co., Kangerga 2	4000	3718
Turman Oil Co., Deason 6	1500	3703
Paul Vitek et al, G. W. Eaton 2	12,000	3729
W. C. Woolf-W. G. Ray Drlg. Co., J. P. Wilson 2	3500	3645
KILGORE FIELD—		
Barnsdall Oil Co., W. Smith 1	7500	3576
Mills-Bennett et al, Brightwell-Palmer 3	15,000	3640
Brightwell-Palmer 5	15,000	3630
Byrd-Frost, Inc., J. B. Watson 1	15,000	3596
Cranfill-Reynolds Co., Clayton Heirs 1	8000	3557
Cordova Union Oil Corp., et al, Bean 1	9000	3691
East Texas Ref. Co., D. Wills 7	10,000	3671
H. W. Elliott et al, S. G. Andrews 3	15,000	3645
Gulf Prod. Co., Solon King 1	7000	3593
A. Godfrey 1	15,000	3595
Muckelroy 2	9500	3558
R. Russell-R. M. Griffin 1	8000	3609
J. B. Watson 2	7500	3576
Harper-Neff Co. (A. W. Phillips) M. T. Cole 1	9600	3603
Pat Hudson-Hawkeye Pet. Co., Smith 2	9000	3609
Humble O&R Co., L. D. Crim 21	5000	3660
L. D. Crim 23	6000	3686
J. A. Knowles 2	6000	3623
S. S. Laird 6-A	9600	3665
S. S. Laird 7-A	7000	3692
E. M. Jones-Houston Oil Co., J. M. Crim 4-B	12,000	3704
Magnolia Pet. Co., Griffin Davis 1	8000	3654
Jessie King 1	12,000	3686
D. Wells 2	65	3646
Marine Corp., Bean 4	9000	3617
C. L. McMahon et al, Dorcas Wells 2	9500	3645
S. S. Laird 2	3000	3658
Mullendore & Berry, W. W. Elder 1	15,000	3592
Navarro Oil Co.-H. L. Brown-Hill, Peterson 2	10,000	3663
Prairie O&G Co., John Elder 1	10,000	3551
Refugio Oil Corp., Barber 1	12,000	3507
Shell Pet. Corp., Bivens 1	7500	3595
J. A. Knowles 2	7200	3658
W. W. Elder 1	10,000	3580
H. R. Smith-Gulf Prod. Co., Peterson 6	10,000	3630
Southern Crude Oil Pur. Co., Smith 1	10,000	3763
Stanolind O&G Co., Ben Laird 5	8000	3747
Tidal Oil Co., Mary Bean 3	15,000	3647
Mary Bean 4	8000	3652
Turman Oil Co., Brightwell 4-B	9000	3669
Westheimer-Cox-Daube & Hamon, Brightwell 1	12,000	3606
Whittle & Kavanaugh, J. B. Watson 2	12,000	3583
Woodley Pet. Co., Dave Ladd 1-B	10,000	3638
Geo. Thompson 2	7500	3706
LONGVIEW FIELD—		
Arkansas Fuel Oil Co., Calvin 1	15,000	3537
McKinley 1-B	8000	3586
Barnsdall Oil Co., McGrede 3	7500	3585
Campbell-Dr. Falvey et al, T. M. Colins 1	12,000	3694
Columbia O&G Co., Thad Snoddy 1	8000	3619
Hawkeye Pet. Co., McKinley 1	10,000	3618
Hickman et al, Moore 1	10,000	3566
S. A. Guiberson, Jr., et al Thrasher-Stuckey 1	15,000	3620
Gulf Prod. Co.-E. L. Smith Oil Co., Clemmons 1	8000	3683
Magnolia Pet. Co., Clem Jones 1	10,000	3630
Mid-Kansas O&G Co., Castleberry 2	5000	3613
Nettleton 2	5500	3479
E. S. Owens-T. T. Roberts & L. R. Whitson, Davis 1	9500	3572
Primrose Pet. Co.-Pennworth Oil Prod. Co., Blackstone 1	10,000	3585
Selby O&G Co., et al H. R. Snavely 1	15,000	3595
Stanolind O&G Co.-Simms Oil Co., Christian 1	10,000	3561
Flewellen 1	6000	3660
Sun Oil Co., M. C. Satterwhite 1	9600	3587
Sinclair O&G Co., M. Moncrief 4	8000	3566
Yount-Lee Oil Co., J. C. McKinley 1-B	12,000	3642
VAN FIELD—		
Pure Oil Co., W. T. Jarman 8	4000	2952
L. A. Smith 3	8000	2938
Ela York (109-ac) 7	3500	2942

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TEXAS

ARCHER COUNTY—F. P. Hynes et al, San Antonio, J. T. Richardson, 80, 1, J. Scott sur, 150 ft from s and e lines of blk 12. Bridwell Oil Co., Wichita Falls, L. F. Wilson 80, 1, B 107, Amer. Trib. sur, 250 ft from n and w li e½ of lot 2.

ATASCOSA COUNTY—Glen Mathis et al, Peteet, C. Martin, 215, 1, G. M. Martin sur, 150 ft from n and 2500 ft from e line.

BEE COUNTY—F. C. Grebin, San Antonio, I. F. Riggs, 340, 1, J. Nowland sur, 1600 ft from n and 2500 ft from e line. Moore & Zweifel, Fort Worth, J. M. Freeland, 300, 2, No. 1, Jno. Pace sur, 600 ft from s and 1000 ft from e line.

BEXAR COUNTY—Mitchell & Ingersoll, San Antonio, E. B. Carruth, 100, 2, 950 ft s of center of n line.

GREGG COUNTY—Mid-Kansas O&G Co., Shreveport, S. S. Dansby, 56, 1, W. P. Chisum sur, 150 ft from e and 200 ft from s line, corrected location. J. J. Castleberry, 202, 2, D. Sanchez sur, 330 ft e of center of w line; J. M. Blackman, 79, 4, W. P. Chisum sur, 200 ft from s and w lines; W. E. Jones, 80, 1, G. W. Hooper sur, 150 ft from n and e lines; B. R. D. Bivins, 202, 2, W. P. Chisum sur, 200 ft from e and 150 ft from s line; J. J. Castleberry, 202, 3, D. Sanchez sur, 150 ft from s and w lines; E. M. Nettleton, 100, 3, J. Ruddle sur, 400 ft w of No. 2. Superior Oil Co., Dallas, A. Jones, 64, 1, G. W. Hooper sur, 300 ft from n and e lines. F & M Drilling Co., Longview, K. C. Moser, 8½, 1, W. H. Castleberry sur, 250 ft from n and w lines. Empire G&F Co., Wichita Falls, L. J. Rogers, 68, 1, G. A. Thomason sur, 330 ft from n and e lines. Barnsdall Oil Co., Tulsa, D. Smith, 33, 1, J. S. Carruthers sur, 187 ft from n and w lines. J. G. McGrede, 109, 2, D. Sanchez sur, 1116 ft from s and 150 ft from e line. Magnolia Pet. Co., Dallas, D. Kelly, 15, 1, J. B. Cadena (Rusk County) sur, 330 ft from s and e lines; G. Davis, 25, 3, W. P. Chisum sur, center; R. L. Saulter, 55, 1, H. H. Edwards sur, 150 ft from s and w lines; B. Davis, 66, 1, W. H. Castleberry sur, 194 ft from n and 336 ft from e line. Sinclair O&G Co., Fort Worth, M. T. Cole, 640, 4, No. 110 S. Brocks sur, 318 ft from n and 907 ft from e line. Yeager & Schubert, Dallas, W. Smith 10, 1, J. S. Caruthers sur, 150 ft from ne and nw lines. Shell Pet. Corp., Dallas, J. Douglas, 74, 2, W. P. Chisum sur, 150 ft from w and 320 ft from s line; J. T. Elder, 50, 1, M. Van Winkle sur, 361 ft from e and 220 ft from s line; W. W. Elder, 185, 5, J. S. Caruthers sur, 300 ft e of center of w line; 6, 150 ft n of center of s line; J. A. Knowles, 65, 3, J. M. Norris sur, 153 ft e and 200 ft from n line; M. Bonner, 37, 1, M. Van Winkle sur, 320 ft from w and 285 ft from s line. Louisiana O&R Co., Shreveport, L. P. Griffin, 37½, 1, M. Van Winkle sur, 225 ft from n and w lines. Kilgore & Hansen, Longview, L. M. Colburn, 5, 1, H. Hathaway sur, 108 ft from w and 162 ft from s line. Indian State Oil Co., Dallas, J. M. Johnson, 11½, 1, M. Van Winkle sur, 150 ft from s and w lines. J. S. Rushing, El Dorado, J. M. Dickson, 16½, 2, W. P. Chisum sur, 290 ft from w and 168 ft from s line. J. E. Johnston, Shreveport, J. V. Borders, 3, 1, M. Van Winkle sur, 195 ft from n and 153 ft from e line blk 135. Sun Oil Co., Dallas, G. W. Tate, 65, 2, W. H. Castleberry sur, 260 ft from n and 360 ft from w line; J. R. Beall, 180, 4, W. P. Chisum sur, 200 ft from n and w lines. D. M. Doyle, Kilgore, Lawrence, 1, M. Van Winkle sur, center of blk 122. Mock-Texas Oil Co., Fort Worth, D. Rodden, 23, 1, D. Sanchez sur, 280 ft from e and 270 ft from s line. Arkansas Fuel Oil Co., Shreveport, A. E. Lee, 70, 1, Wm. Robinson sur, 350 ft from n and 370 ft from w line. Humble O&R Co., Houston, T. M. Armstrong, 79½, 2, Crosby-Rigsby sur, 672 ft s of No. 1. Petroleum Finance Corp., Longview, W. D. Lacy, 86, 1, E. H. Grisham sur, 300 ft from e and 350 ft from s line. W. F. Turner, Longview, A. Jones, 54, 3, Hooper sur, 367 ft w of No. 2; 2, 150 ft from n and 378 ft from e line; W. H. Richey, 40, 1, H. Edwards sur, 150 ft from n and w lines. Gulf Prod. Co., Fort Worth, Lacy-Snider, 75, 2, W. H. Caselteberry sur, 330 ft from n and w lines; M. B. Hughey, 50, 1, P. W. Warraner sur, 159 ft from n and 334 ft from e line. Geo. B. McCamey, Fort Worth, W. Smith, 5, 1, J. S. Caruthers sur, 270 ft from n and 201 ft from w line. King & Massengill, Longview, E. I. Anderson, 13½, 1, G. W. Hooper sur, 200 ft from e and 155 ft from s line. Yount-Lee Oil Co., Beaumont, J. D. Davis, 2, Wm. Robinson sur, 4050 ft from n and 390 ft from w li sur; T. Snoddy, A1, W. H. Castleberry sur, 1125 ft from n and 850 ft from e li of sur; G. Fenton A2, D. Sanchez sur, 4225 ft from w and 2425 ft from s li sur; I. Denison, 2, D. Sanchez sur, 5650 ft from s and 6610 ft from e li of sur; E. Snoddy, 1, W. H. Castleberry sur, 1125 ft from n and 300 ft from e li of sur; McKinley B3, D. Sanchez sur, 1625 ft from s and 2725 ft from w li of sur; L. Lee, 2, Wm. Robinson sur, 7080 ft from w and 254 ft from n li of sur; 1, 6150 ft from w and 167 ft from n li of sur; McKinley B2, Sanchez sur, 2325 ft from s and 3710 ft from w li of sur; B4, 229 ft from s and 2900 ft from w li of sur. Navarro Oil Co., Houston, T. B. Harris, 80, 1, W. H. Castleberry sur, 150 ft from n and w lines. Humble O&R Co., Houston, D. Thomas, 172, 1, M. Van Winkle sur, 157 ft from n and se line; Merren & Mays, Shreveport, J. S. Dansby, 15, 1, W. P. Chisum sur, 150 ft from s and e lines. Arctic Oil Co., Fort Worth, W. N. Crim, 4, 1, M. Van Winkle sur, 150 ft se of center of nw line. E. E. Fogelson, Longview, R. Anderson 2, 1, M. Van Winkle sur, 80 ft from n and 120 ft from w line. H. W. Elliott, Fort Worth, I. Benson, 8, 1, W. P. Chisum sur, 132 ft from w and 150 ft from s line. Overlees & Pothybridge, Marshall, M. Fenn, 2, 1, Geo. Hampton sur, 126 ft from n and 172 ft from e line. Thos. J. Cox, Inc., Longview, Fendley, 3¼, 2, C. H. Alexandria sur, 150 ft from s and w lines.

GRAY COUNTY — Boyle et al, McLean, Geo. Colebout, 80, 1, S 65, B 25, H&GN sur, 330 ft from n and e lines. Magnolia Pet. Co., Dallas, W. C. Heaston, 80, 1, S 164, B 3, I&GN sur, 330 ft from n and e lines. Interstate Prod. Co., Amarillo, Frashier, 100, 1, S 177, B 3, I&GN sur, center of sw¼. Stekoll & Rieger, Amarillo, J. C. Short, 160, 1, J. C. Short sur, 330 ft from s and w lines.

GUADALUPE COUNTY — Adams, Lyles, North & Walton, San Antonio, A. Zobroski, 50, 1, J. D. Clements sur, 500 ft from n and 700 ft from w line.

HARDIN COUNTY — Rio Bravo Oil Co., Houston, Fee, 158, C117A, H. F. Cotton sur, 150 n and 150 ft e of No. 116A; C118A, 200 ft n and 50 ft w of No. 116A.

JONES COUNTY—Moutray Oil Co., Abilene, J. W. Hoyt, 50, 2, No. 195 M. G. Martinez sur, 200 ft from w and 600 ft from s line. J. C. Abers, Abilene, L. C. Burton, 43, 1, B 5, G. Martinez sur, 175 ft from e and 150 ft from s line. Union Oil Co., Abilene, S. W. King, 68, 1A, No. 196 M. Bueno sur, 200 ft from n and e lines.

LIBERTY COUNTY—Weneeden Oil Co., Beaumont, Palmer, 37, 1, Underton & Devore sur, 150 ft from n and 200 ft from e line. Sun Oil Co., Beaumont, L. Carr, 14½, 8, J. Devore sur, 50 ft from w and 100 ft from s line.

MEDINA COUNTY — J. M. Hickey, San Antonio, Fee, 45, 1, Lot 4, Blk 3, 150 ft from s and e lines; M. Jungman, 50, 1, S 31, J. Degant sur, 150 ft from n and e lines

MOORE COUNTY—Texas Interstate Pipe Line Co., Stinnett, Zeiness, 2, S 55, B 6T, T&NO sur, center of se¼; Sneed, 1, S 33, B 6T, T&NO sur, center of sw¼.

MORRIS COUNTY—Selby O&G Co., Tulsa, W. M. Coffee, 402, 1, No. 29, W. M. Coffee sur, 520 ft from e and 200 ft from s line.

NACOGDOCHES COUNTY — Big Indian Synd., Dallas, W. W. Halbert sur, 320, 1, A. G. Walling sur, 660 ft from s and e lines. Morgan Oil Corp., Dallas, J. E. Reese, 20, 1, J. L. Bega sur, 197 Vs. from e and 107 Vs. from s line.

ORANGE COUNTY—Gulf Prod. Co., Fort Worth, K. Kishi, 135½, 1, J. Dyson sur, 378 ft from e and 234 ft from s line. Crews O&G Co., Beaumont, G. T. Mansfield, 80, 2, J. W. Hill sur, 700 ft from n and 2600 ft from w line.

RUSK COUNTY—Restal Drilling Co., Henderson, J. P. Maxwell, 16½, 2, I. G. Parker sur, 304 ft from w and 150 ft from s line. Snowden & McSweeney Co., Fort Worth, R. H. Laird, 133, 4, Chisum-Ruddle sur, 170 ft from s and 865 ft from w line. Houston Prod. Co., Houston, S. S. Laird, 9, 1, J. McKim sur, 200 ft from n and 150 ft from w line. Turman Oil Co., Tulsa, W. P. Brightwell, B, 30, 3, R. E. Winn sur, 775 ft s of No. 2. J. J. O'Hern, Tyler, M. M. McMillan, 33, 1, T. J. Martin sur, 200 ft from s and 225 ft from e line. W. A. Tunstill, Fort Worth, J. Menshaw, 10, 1, H. B. Dance sur, 300 ft from n and 160 ft from e line. Texas Co., Houston, G. G. Turner, 30, 1, T. H. Smith sur, 435 ft from w and 252 ft from s line. Babcock Bros., Denison, N. Cooper, 23, 1, I. G. Parker sur, 150 ft from n and w lines; 2, 300 ft s of No. 1; 3, 150 ft from s and w lines. Shell Pet. Corp., Dallas, R. Russell, 126, 5, R. W. Smith sur, 690 ft from s and 321 ft from w line; 6, 600 ft from n and 376 ft from e line. Wilson-Brown, Kilgore, M. R. Terrell, 24, 1, E. G. Sevier sur, 269 ft from n and 150 ft from w line. Arrow Ref. Co., Fort Worth, E. S. Thrash 3½, 1, F. Cordova sur, 130 ft from n and 450 ft from w line. Jno. W. Hooser, Dallas, Geo. Eaton, 29, 1, F. Cordova sur, 200 ft from n and 225 ft from e line; L. Taliaferro, 5½, 1, J. Ximinez sur, 200 ft from n and w lines; G. McElroy, 10, 1, F. Cordova sur, 261 ft from e and 150 ft from s line. Kirby Pet. Co., Houston, J. Williams, 65½, 1, T. J. Martin sur, 330 ft from s and w lines. Magnolia Pet. Co., Dallas, D. Kelly, 15, 1, J. B. Cadena sur, 330 ft from s and e lines; W. D. Moore, 152, 4, J. Elington sur, 330 ft s of center of n line. Woodley Pet. Co., Shreveport, Geo. Thompson, 10, 1, R. E. Winn sur, 219 ft from w and 324 ft from s line; J. Ladd, B, 5, 1, Chisum-Ruddle sur, 150 ft from n and e lines. E. F. Fogelson, Longview, D. Wade, 2½, 1, D. Clarke sur, 105 ft s of center of n line. H. L. Hunt, Henderson, Smith-Wilson, 61, 1, Geo. Berry sur, 240 ft from n and 330 ft from w line; B. F. Maxwell, 23, 1, R. H. Penney sur, 250 ft from s and w lines. Navarro Oil Co., Houston, R. N. Brightwell, 107, 4, Y'Barbo sur, 531 ft from e and 171 ft from s line; W. A. Hindman, 11, 1, W. W. Simms sur, 150 ft from w and 218 ft from s line. Houston Oil Co., Houston, N. Bean, A, 20, 2, R. E. Winn sur, 150 ft from s and e lines. McCulloch Co., Tyler, J. D. Stone, 59, 1, M. J. Pru, 150 ft from s and e lines; F. J. Cox, 60, 1, W. H. Bears sur, 330 ft from w and 384 ft from s line. Tulsa Oil Co., Tulsa, C. F. O'Quinn, 27, 1, Geo. Berry sur, 330 ft from n and 348 ft from e line. Cordova-Union Oil Corp., Fort Worth, C. O. Christian, 97, 1, M. McCabe sur, 269 ft from n and 300 ft from w line; J. S. Bean, 49, 2. J. Lewis sur, 200 ft from s and w lines. Humble O&R Co., Houston, S. S. Laird, 230, A11, I. Ruddle sur, 150 ft from e and 1671 ft from s line. Mid-Kansas O&G Co., Tulsa, E. E. Moores, 200, 1, J. B. Cadena sur, 850 ft from w and 150 ft from s line; S. H. Moores, 193, 4, M. J. Pru sur, 150 ft from n and 1218 ft from e line. British American Oil Prod. Co., Tulsa, W. A. Ector, 11½, 2, R. W. Smith sur, 754 ft from e and

For Tabulation and Comparison See Market Section

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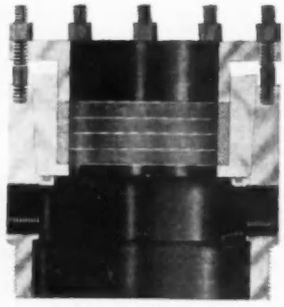

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ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn — abandoned; bbls—barrels; b.s—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd — shut down; sdtr — sidetracking; sp — spudding; sr — straight reaming; std — standardizing; sw—salt water; td—total depth; ur—underreaming; wo — workover; wosr—waiting on standard rig.

163 ft from s line; Kangera, 69, 3, M. J. Pru sur, 200 ft from s and w lines. Donley-Chastain, Tyler, C. C. Giles, 5, 1, M. J. Pru sur, 225 ft from n and 238 ft from e line. East Texas Ref. Co., Dallas, Webb, 15, 1, Thos. Grace sur, 150 ft from n and e lines. C. P. Oil Co., Henderson, A. Thrash, 18¼, 1, B 2, M. J. Pru sur, 150 ft from n and e lines; 2, 150 ft from s and e lines; Giles, 31, 1, M. J. Pru sur, 150 ft from e and 450 ft from s line; 2, 150 ft from s and e lines; 3, 150 ft e of center of w line; M. Alford, 20, 4, J. Ximinez sur, 150 ft from n and e lines.

REFUGIO COUNTY—Mission Drilling Co., San Antonio, J. J. O'Brien, 12½, 2, 162 ft from s and e lines.

SHACKLEFORD COUNTY—Wis-Tex O&G Co., Abilene, Goodwin-Walker, 40, 1, S 62, B 13, T&P sur, center.

SMITH COUNTY—H. L. Hunt, Henderson, R. W. Fair, 131, 3, McAnulty-Vargas sur, 150 ft from w and 750 ft from n line; S. S. Cook, 20, 1, Jas. Jordan sur, 220 ft from e and 250 ft from s line.

WICHITA COUNTY—Mrs. W. C. Witcher, Wichita Falls, G. P. Woodruff, 80, 2, B 269, Wag. Col. sur, 1200 ft from e and 150 ft from s line. F. C. Baldwin et al, Fort Worth, A. J. Overall, 80, 2, DL&C sur, 300 ft w of No. 1. Mid-Continent Holding Corp., Wichita Falls, Burnside, 38, 10, J. M. Sharp sur, 940 ft from n and 800 ft from e line.

WHARTON COUNTY—Rose-Tex Oil Co., Rosenberg, M. S. Floyd, 32, 3, S. F. Austin sur, 125 ft ne of No. 2.

YOUNG COUNTY—W. F. Brazleton et al, Graham, Belknap, 40, 3, 21 TE&L sur, 150 ft from n and 600 ft from e line. F H E Oil Co., Fort Worth, T. J. Routon, 100, 1, 24 TE&L sur, 150 ft from n and e lines of sec. S. Faith 40, 1, 2447 TE&L sur, 200 ft from n and w lines. W. F. Powers, Olney, J. M. Nall, 1, 998 TE&L sur, 600 ft from n and 700 ft from w line.

OKLAHOMA

CARTER COUNTY—Trevelyn Oil Co., Ratcliff 1, ne nw sw, 19-1s-2w. Magnolia Pet. Co., Franklin 1, sw nw ne, 15-1s-3w.

CREEK COUNTY—J. H. Winemiller, O. U. R. R. 1, nw ne sw, 32-17-12e. J. H. Wright Estate, Maloney 1, sw c se 19-17-11e. Gilcrease Oil Co., Lindsley 1, ne c 35-17-9e.

HASKELL COUNTY—W. L. Bowers O&G, Kinta Townlot 1, se c sw sw 31-8-20e. Enterprise Gas Co., McKinney 1, c sw ne 10-9-18e.

MUSKOGEE COUNTY — C. W. Brown, Smith 2, sw c ne nw sw 14-15-15e.

OKLAHOMA COUNTY—Slick Estate, Curtiss 1, nw c se nw 3-11-3w. Skelly Oil Co., Spencer 1, ne nw se, 15-11-3w. Wilcox, Anderson and Kerr, Danforth 1, ne c se ne sw 15-11-3w. Phillips Pet. Co., Chapin-Levi 1, ne nw nw 10-11-3w.

OKMULGEE COUNTY—Mack Drlg. Co., Ulrich 1, nw c sw se sw 30-14-13e. A. W. Cline, Harrison 8, (owd), cel ne sw 19-15-14e.

PITTSBURG COUNTY — Utilities Producing Co., Vail 3, nw c se se 8-7-18e.

SEMINOLE COUNTY—Cromwell O&G et al, Dunsen 1, nw c ne, 4-9-8e.

TULSA COUNTY — Bower and George, Chisholm 1, nw c ne 5-17-14e. Deems and Bradshaw, Grayson 1, se nw ne, 18-19-14e.

KANSAS

McPHERSON COUNTY—
Ritz O&G and Shell, Neufelt 1, sw c nw, 15-21-3w. Phillips Pet. Co., Morehouse 2, (owd) nw c, 3-21-3w. Gypsy Oil Co., Stucky 1, (owd) se sw se 33-20-3w. Shawver and Shell, Decker 1, ne c 2-20-2w. McPherson O&G Dev. and Shell, Griffin 3, c se nw 14-19-2w. McPherson O&G Dev. and Shell, Meyers 3 "B", c ne se, 14-19-2w.

MORRIS COUNTY—
General Utilities Co., Alexander 1, c nw ne 22-17-7e. General Utilities Co., Irwin 1, ne sw sw 15-17-7e.

RICE COUNTY—Rogers et al, Walsten 1, ne c 9-21-6w.

SEDGWICK COUNTY—Shell Pet. Corp., Lygrisse 3 "A" (owd) cel sw sw ne, 15-26-2e. Gypsy Oil Co., Hamant 3, (owd) sw nw sw 14-26-2e.

CALIFORNIA

LOS ANGELES COUNTY—The Lucky Four Syn., No. 1, 29-4-13; No. 2, 29-4-13.

MT. POSO—General Pet. Corp., Heisen 28, 16-27-28.

ORANGE COUNTY — McAleer Gun Club Syn., No. 1, 21-5-11. George E. Miller, No. 1, 20-5-11.

ROUND MOUNTAIN — Golden Bear Oil Co., No. 2, 6-28-29; No. 3, 6-28-29; No. 4, 6-28-29; No. 5, 6-28-29.

SANTA BARBARA COUNTY — Zaca Oil Co., Zaca 1, 20-7-31.

SIMI—Mahlon H. Wolff, Loomis 1, 6-2-17.

LOUISIANA

OUACHITA PARISH—Ark. La. Pipe Line Co., Shreveport, La., McEnery 6, 28-19n-4e, 700 ft n and 700 ft e of sw cor of nw¼.

ST. LANDRY PARISH — The Texas Co., Shreveport, La., Botany Bay 10, 4-6s-5e, 100 ft from s line and 100 ft from e line of Texas Co., 55 acre Daniels Tr. in Sec 4.

TENSAS PARISH—Nick Barbare, Waskom, Texas, Mutual Realty Co. 1, 36-11n-9e, 660 ft s and 660 ft w of ne cor of sec.

WINN PARISH—Gulf Refg. Co., Shreveport, La., Bodcaw Lbr. Co., A-1, 4-10n-5w, 911 ft n and 970 ft e of sw cor of sec.

— — — — — — — — — — CUT OUT AND MAIL — — — — — — — — — —

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Wildcat Reports From All Sections

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WEST TEXAS
Completions

TAYLOR COUNTY—
J. B. Jameson et al, Webb 1 ..... * 6396
Sanger et al, Abilene Water Works 1 * 2785
WARD COUNTY—
R. F. Owen et al, Johnson 1 .... * 5005

CENTRAL EAST TEXAS
Completions

RUSK COUNTY—
Westexas Oil & Roy. Corp., King 1 * 3772

ANDERSON COUNTY—H. B. McConnell et al's Walston 1, M. Main sur, dk. Rianjo Pet. Co.'s Lynn 1, dr 760 ft.

BOWIE COUNTY—Mayfield Oil Royalties & Devore's R. B. Cooper 1, W. M. Ward sur, elev 360 ft, sd 1955 ft. Tom Bell-W. A. Swift & G. W. Hindman's Roy Merritt 1, Y. S. McKinney sur, sd 2525 ft. Lee J. Timberlake et al's J. M. Tidwell 2, L. M. Rice sur, elev 290 ft, sd 3000 ft.

CAMP COUNTY—W. E. Duke et al's L. B. McCaslin 1, Mary Hays sur, rig.

CASS COUNTY—R. G. Baker et al's W. R. Kaver 1, John Lick sur, top Pecan chalk 2286 ft, sd 2630 ft. Everets Drlg. Co. et al's H. W. Bullington 1, H. E. Callahan sur, sd 800 ft. Geo. B. McCamey et al's R. E. Hall 1, H. Buckler sur, Pecan chalk 2387 to 2850 ft, Austin chalk 3035-3145 ft, coring 3340 ft. C. E. Murdock et al's Coody-Bank 1, E. Watson sur, elev 401 ft, sd 3990 ft. Nelson et al's Irvin 1, M. Harris sur, lcn. Olds-Smith et al's Joe Anthony 1, J. C. Byers sur, sd 2635 ft. Pigg & Davis (Fraley & Nicholson's) Ray Bryan (88-ac) 1, A. H. Latimer sur, sd 1970 ft.

CHEROKEE COUNTY—Ben Banner et al's A. S. Lacy 1, J. L. Hogg sur, elev 317 ft, top Pecan chalk 3450 ft, dr 3555 ft. D. Harold Byrd et al's Fariss 1, elev 215 ft, dr 4255 ft. Helen Clair Oil Co.'s Perkins 1, rig. H. M. Jones et al's McLee 1, Jas. Knight sur, Pecan chalk 3138-3450 ft, sd 3477 ft. Rowan-Nichols Oil Co.-Tidal Oil Co.'s W. T. Norman 1, Irby Large sur, Pecan chalk 3340-3690 ft, dr 3720 ft. Shell Pet. Corp.'s Southern Pine 1, lcn abn. W. A. Stone et al's E. M. Decker 1, Geo. Ruddle League, Pecan chalk 4342-4640 ft, dr 4965 ft. Walton Oil Co.'s E. Singleton 1, Tillman Waters sur, sd 2960 ft. Wilson & Stubbs' Roberts 1, J. D. Wolfin sur, dk.

DELTA COUNTY — The Delta Co.'s M. Neatherly 2, J. B. Arnold sur, sd 3145 ft. D. S. Hoad et al's J. J. Baker 1, B. Carson sur, elev 437 ft, sd 1555 ft.

FRANKLIN COUNTY—Harper-Byers Oil Co.'s A. J. Laws 1, D. G. Rogers sur, co 3055 ft. L. B. Pruitt & Geo. L. Pace et al's C. E. Cowan 1, Sam Lipscomb sur, dr 2010 ft.

FREESTONE COUNTY—J. P. Haley & Young's M. C. Lancaster 1, D. Avant sur, dk. E. L. Smith Oil Co.'s E. Jackson 1, Wiley Carter sur, elev 320 ft, top Austin chalk 2825 ft, dr 2965 ft.

HENDERSON COUNTY—Arcadia Ref. Co.-Shell Pet. Corp.'s Dean 1, Simon Boon sur, Pecan chalk 2432-2524 ft then to 2650 ft, Austin chalk 3330-3558 ft, show gas in top Woodbine sand 3893-3955 ft. Westhyde Inv. Co.'s Thornhill 1, Jas. Spivey sur, elev 461 ft, dr 1865 ft.

LAMAR COUNTY—Everett & Allen's J. A. Guest 1, Luke Roberts sur, elev 525 ft, top Pecan chalk 2072 ft, sd 2700 ft. Puritan Oil Co.'s Geo. Parr 1, R. Russell sur, sp and sd.

LEON COUNTY—Cooper et al's Lynch 1, T. H. Gardner sur, dk. Sun Oil Co.'s Ella Grayson 2, Marquette Blk, dr sandy-shale 905 ft.

MORRIS COUNTY — Verne Dumas Pet. Co.'s Thos. Ball 1, A. S. Young sur, rig. Lewis & Selby O&G Co.'s C. D. Browne 1, sp and sd. T. J. Shaw et al's C. D. Browne 1, lcn.

RAINS COUNTY—Berry-Hale et al's Owenby 1, J. Alexander sur, sd 2095 ft.

RED RIVER COUNTY—Concord Oil Co.'s Norris-Guest (35-ac) 2, lcn. C. M. Joiner-M. Harris & Echols' E. Howison 1, W. Humphries sur, elev 540 ft, sd 1960 ft. Everett & Allen (S. A. Ross et al's) W. F. Bryan 1, P. Vaughn sur, dk. Pierson et al (Concord Oil Co.'s) J. R. Dillahunty 1, I. Moore sur, sd 430 ft.

RUSK COUNTY—Adams & Williams' Stephens 1, M. Sanchez sur, dk. A. J. Brown et al's Strong 1, John Hallam sur, dk. Caprock O&G Co. (was R. C. Viehl's) Burton 1, J. J. Ybarbo sur, rig. R. W. Giles-Frank Melat et al's Newt Orr 1, Wm. Tippett sur, top Pecan chalk 1980 ft, fsh 2635 ft. Albert W. Jones Oil Co.'s J. Menefee 1, T. G. Walling sur, sp and sd. J. S. Kimbrough et al's Weatherly 1, Robt. Martin sur, Pecan chalk 2784-3240 ft, sd 3325 ft. E. C. Laster, Inc., & Miller's B. B. Gray 1, Jas. McLean sur, sd 1225 ft. Leonard Pet. Co.'s Sanger-Tablowski 1, J. P. Meredith sur, dr 2870 ft. Pitts et al's Freeman 1, J. Watkins sur, dk. Nat Sadler et al's Ed. Sparks 1, Abner Nail sur, dr 1640 ft. Sinclair O&G Co.'s March 1, L. Williams sur, top Pecan chalk 2676 ft, dr 2950 ft. Westexas Oil & Roy. Co.'s King 1, Pecan chalk 2650-3100 ft, base Austin chalk 3731 ft, abn in Georgetown lime 3766-72 ft.

SMITH COUNTY—Arkansas Drlg. Co.'s L. A. Wallace 1, W. W. Avery sur, dr 610 ft. Big Indian Oil Synd.'s Wolford 1, top Pecan chalk 2690 ft, Austin chalk 3545-3625 ft, completed in sand 3709-16 ft. J. A. Brown et al's T. V. Wright 1, spd and sd. C. B. Bunte, Inc.'s, J. Adkisson 1, dk. Central Oil & Gas Co.'s Wrigtht 1, dk. Concord Oil Co.'s Wolford 1, base Pecan chalk 3024 ft, Austin chalk 3558-3663 ft, completed in sand 3715-18 ft. C. P. Oil Co.'s Wright 1, rig. Cotton Belt Oil Co.'s Moore-Jackson 1, dk. R. H. Dearing & Roy Long's Wright 1, dr 2260 ft. Deason Oil Co.'s Wright 1, rig. Verne Dumas Pet. Co.'s Cook 1, rig. East Texas Dev. Co.'s Negro Church 1, lcn. Bailey Gaunce et al's Cook 1, Jas. Jordan sur, sd 2550 ft. Imperator Oil Corp.'s I. M. Green 1, T. Hogan sur, sd 2210 ft. C. M. Joiner Pet. Co.'s W. M. Wright 1, E. Van Sickle sur, top Pecan chalk 3756 ft, dr 4115 ft. Macmillan Pet. Corp.'s Wright 1, dk. Miller et al's McDavid 1, rig. C. R. Morrison et al's I. Roy 1, H. C. Cooke sur, top Pecan chalk 2880 ft, sd 3340 ft. Owen-Sloan Oil Co.'s M. Starnes 2, Sam Epps sur, elev 357 ft, Pecan chalk 2620-2973 ft, Austin chalk 3687-3715 ft, testing salt water horizon in Woodbine 3879-99 ft, td 3965 ft. A. W. Phillips et al's Morrison 1, Wm. Harrison sur, dk. M. M. Rowan et al's Gibbons 1, J. M. Garcia sur, sd 1805 ft. Sun Oil Co.'s E. O. Henson (54-ac) 1, dk; R. L. Henson (34-ac) 1, dk; A. V. Ritch (54-ac) 1-B, dk; J. D. Henson (216-ac) 1, Pecan chalk 2702-3093 ft, top Austin chalk 3514 ft, testing 3684 ft. The Texas Co.'s Blackwell 2, sp.

TITUS COUNTY—Cook et al's Rogers 1, Moore sur, sp and sd. C. M. Joiner Pet. Co.'s C. D. Browne 1, Bard Evans sur, sp and sd.

UPSHUR COUNTY—Arcadia Ref. Co. & Harper's Johnson 1, J. H. Mallory sur, Pecan chalk 2461-2971 ft, dr shale 3965 ft. Becker et al (was Maudeville & Thompson's) Webb 1, top Pecan chalk 2600 ft, dr 2675 ft. Bremen & Woods' Robertson 1, J. Stephenson sur, elev 390 ft, Pecan chalk 2640-3003 ft, top Austin chalk 3599 ft, sd in shale 3661 ft. Joe Burnham et al's Beck 1, H. W. Augustine sur, rig. Clark & Cowden's J. W. Free 1, lcn. Cockrell et al's C. L. Lee 1, W. L. Palmer sur, rig. W. R. Daniels et al's A. Callahan 1, E. A. J. Evans sur, sp. Verne Dumas Pet. Co.'s A. C. Phillips 1, S. Harrell sur, dk. Fleetborn Oil Corp.'s Edwards 2, dr 750 ft. Home Oil Co.'s F. D. Futchell 1, A. Lumbrera sur, sd 2400 ft. Humble O&R Co.'s Edwards 1, D. Ferguson sur, Pecan chalk 2528-3011 ft, Austin chalk 3566-3603 ft, testing sand 3611-3638 ft; A. O. Phillips 1 and 2, rigs; Chas. Love et al's Landers 1, dk. Magnolia Pet. Co.'s H. Hampton 1, D. Ferguson sur, Pecan chalk 2570-3044 ft, top Austin chalk 3655 ft, testing oil sand 3696-3709 ft; Hampton 2, rig; Hampton 3 and 4, lcns. McMahon et al's Hamilton 1, M. Chandler sur, dk. McPhail-Smith & E. B. Perkins' Kay 1, T. G. Elliott sur, top Pecan chalk 2601 ft, sd 2910 ft. Mudge Oil Co.'s J. W. Free 1, dr 400 ft. W. H. Peckham et al's J. W. Free 1, lcn. Mrs. J. Richardson et al's O'Bryne 1, Wm. Bratton sur, dk. Sorrels & Duffey (was J. W. Greene's) Wooden 1, I. Williams sur, sp and sd. A. C. Trammell et al's M. A. Vickery 1, E. A. J. Evans sur, Pecan chalk 2591-3005 ft, dr 3090 ft. Tarver et al's J. W. Free 1, lcn. R. M. Weaver, Jr.-Young Bros. & Alexander's L. J. Everett 1, W. Goodwin sur, Pecan chalk 2465-2592 ft, dr 2620 ft. Union Drlg. Co. et al's W. M. Phillips 1, H. Edwards sur, rig.

VAN ZANDT COUNTY—L. R. Barton et al's C. L. Hubbard-Nixon 1, M. J. Cadena sur, sp and sd. Clifford Oil Co.'s H. F. Haake 1, John Hawks sur, sd 1090 ft. C. M. Joiner Pet. Co.'s T. B. Meeks-Randall 1, A. L. Dutcher sur, top Pecan chalk 2380 ft, dr 2550 ft. Texas Chief Oil & Royalty Corp.'s Foster 1-A, F. Montgomery sur, sd 3000 ft.

VAN FIELD — Humble O&R Co.'s R. S. Blake 12, Pecan chalk 1760-1880 ft, no Austin chalk, cem 7-inch cas on oil sand 2368-2887 ft. Pure Oil Co.'s J. R. Shivers (46-ac) 3, dr 1505 ft; F. B. Smith (80-ac) 7, rig; H. P. Tunnell (135½-ac) 2, dr 1250 ft. Shell Pet. Corp.'s E. L. Fowler (32.65-ac) 10, dr 1350 ft.

WOOD COUNTY—Deep Rock Oil Co.'s M. Smith 1, Pecan chalk 2785-2895 ft, fsh 3900 ft. Main Holding Co.'s Stewart 1, E. ReHorse sur, dk. Paul Vitek et al's Rosa Vogel 1, Sarah English sur, sp and sd. Walmar Oil Co.'s J. Ivey 1, A. Hamilton sur, rig. Wood County Dev. Co.'s M. M. Rick 1, D. Fuller sur, sd 1950 ft.

EAST TEXAS
Completions

HARRISON COUNTY—
Hunter et al, Daugherty 2, W. B. Burris sur ..... * 3563
Crump & Hannagan, Dunn 1, Bettie Humphries sur ..... * 4006

HARRISON COUNTY — Hunter et al's Daugherty 2, W. B. Burris sur, 12½ cas 245 ft, dry abn in Georgetown, td 3563 ft. C. H. Parkening's T. J. Taylor 1, Walter H. Payne sur, elev 201 ft, 12½ cas 215 ft, top SC 1624 ft, dr chalk 2150 ft. Crump & Hannagan's Dunn 1, Bettie Humphries sur, elev 330 ft, dry abn in Georgetown, td 4006 ft. Siegel Bros. et al's T. J. Taylor 1, F. O.'Neal sur, dk. Banner et al's Lowrey 1, W. O. Stanfield sur, top Nacatosh 1700 ft, top PG 2136 ft, cored Blossom sand showing oil 2797-2805 ft, 6-inch cas 2797 ft, tested sw at 2805 ft, top AC 2170 ft, dr chalk 3200 ft. Ryan Cons. Pet. Corp.'s H. H. Key 1, E. Carroll sur, 12½ cas 488 ft, top PG 1737 ft, base PG 2300 ft, cored Blossom sand 2485-91 ft, no show, arr deepen (Trinity test planned). Everts Drilling Co.'s Sypert 1, Richard Hooper sur, elev 311 ft, no Nacatosh top PG 2140 ft (cor. depth), sd 2765 ft. J. M. Gholson's Bivins 1, T. K. Pearson sur, sp. Olford et al's Bolding 1, W. O. Stanfield sur,

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn — abandoned; bbls—barrels; b.s—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd — shut down; sdtr — sidetracking; sp — spudding; sr — straight reaming; std — standardizing; sw—salt water; td—total depth; ur—underreaming; wo — workover; wosr—waiting on standard rig.

base Nacatosh 1820 ft, sd in sandy shale 2020 ft. Thomas & Kinsey's J. R. Watson 1, Thos. Iden sur, dk.

NACOGDOCHES COUNTY—Adams & Williams' Stephens 1, Sanchez Sur., ru. Big Indian Oil Co.'s Stewart 1, Black Jack Community, dk. Texokla Corp.'s Driver 1, Torres Sur., dr 2000 ft. Benedum Trees' Conkrite 1, Chireno Sur., dr 4135 ft chalk. West Texas Oil & Royalties Corp.'s King 1, west of Garrison, dr 3630 ft shale. Fain & McGaha's Pirtle 1, Edward Sur., dr 3010 ft shale. Upland Oil Co.'s Cooper 1, Windsor Sur., dr 3870 ft chalk. R. E. Burt's Reese 1, ½ mi s Nacogdoches, dr 290 ft. W. W. Wheeler's Parmley 1, Kirby Sur., dr 3600 ft. E. L. Chapman-Tilford's Hunt 1, Strode Sur., dr 3800 ft chalk and lime. Joiner-Henson's Andy Legg 1, Durst Sur., dr 3120 ft shale. Paul Vitek's Hayter 1, Santos Coy Sur., dr 2810 ft.

MARION COUNTY—Rondeau & Hindman's McGaugherty 1, W. J. Wills sur, dr 3345 ft. Lindsay 1, Alex Albright sur, sd 400 ft. J. W. Hamilton's Wood 1, Alex Albright sur, sd 400 ft. Claunch et al's Laun 1, Henry Fugham sur, rig. Sheldon et al's Brown 1, E. B. Fowler sur, 12½ cas 519 ft, sd 2200 ft.

PANOLA COUNTY—Bell et al's Burnett Lbr. Co. 1, S. B. Hendrick sur, elev 186 ft, sd 3335 ft. Dillon & Bradham's Baldwin 1, Hampton West sur, 12½ cas 43 ft, claim top PG 1500 ft, sd 1555 ft. United Prod. Corp.'s Steele 17, B. C. Jordan sur, lcn (Trinity test). Werner 10, B. C. Jordan sur, 9-inch cas 3450 ft, dr lime 3490 ft (Trinity test). Southwestern O. & G. Co.'s Vinson 1, C. T. Anderson sur, dr 3402 ft. Daisy O&G Co.'s Rucks Hrs. 1, Jno. Palmer sur, 12½ cas 780 ft, top chalk 1352 ft, 8½ cas 1900 ft, sd 3760 ft. Everett Prod. Co.'s McDaniel 4, Alamson Barr sur, claim 30 ft bro sand showing gas 1285-1315 ft, did not test, dr chalk 2650 ft. Moses & Wallace's C. L. Daniels 1, Isabel Hanks sur, dk. Hoffer et al's Cameron 1, W. A. La Grone sur, dk. Davidson et al's Latham 1, Wm. Rich sur, (cor. lcn.) 10-inch 40 ft, dr 525 ft. Ark. La. P. L. Co.'s Werner 14, B. C. Jordan sur, 12½ cas 150 ft, dr 2500 ft (Trinity test). Nelson et al's Williams 1, Jas. Hanks sur, dk.

SHELBY COUNTY—Sloane Prosp. Co.'s T. B. Sandford 1, M. M. Vann sur, 12-inch cas 300 ft, top PG 2350 ft, dr PG 2825 ft; Windham 1, A. H. English sur, elev 307 ft, 10-in 180 ft, 6⅝ cas 2652 ft, show oil in Blossom at 2680 ft, made oil heads from brok chalk 3389-99 ft, ran Layne & Bowler ds, did not flow, tried set 2 canvas pckrs and lead seal, could not get on bottom, arr cement 4½-inch cas, td 3399 ft. Chapparral Oil Co.'s Holt 2, Matthew Moore sur, arr res, td 3111 ft. E. L. Chapman's Pickering Lbr. Co. 1, C. F. Henry sur, 10-inch 240 ft, dr lime 3562 ft. Maulding et al's Frost Lbr. Ind. 1, A. B. Fountain sur, 12½ cas 500 ft, sd wo heavier rig, td 1880 ft. H. H. Gracey's J. A. Morrison 1, Wm. English sur, 10-inch 200 ft, dr 2025 ft. L. M. Bradley et al's J. J. Asberry 1, G. W. Mitchell sur, base PG 2292 ft, dr sandy shale 2660 ft. T. A. Martin's J. A. Bush 1, Alfred Lindsay sur, mov in rig. Joiner et al's Foster & Billingsley 1, J. Bowlin sur, sp set 10-inch 174 ft. Schultz et al's Hughes 1, J. Clay sur, 10-inch 80 ft, dr 2340 ft. C. H. Tautenham's J. C. Bogard 1, Thos. Baker sur, dk. Glidden & Stephenson's Pickering Lbr. Co. 1, Jonas Harrison sur, materials. Ridgeway et al's Polley 1, Domingo Gonzales sur, lcn. Geo. L. Pace's Powers 1, John Tims sur, lcn. T. W. Tennent's Henry 1, Jno. Spradley sur, lcn.

SOUTH TEXAS

ATASCOSA COUNTY—George Keith, Jr.'s, Mrs. G. M. Martin 1, 3 mi s Amphion, dr 1000 ft.

BASTROP COUNTY — Schimmel & Batts (Texas Petroleum Co.) Ferguson 1, J. Doyle sur, 1000 ft s Williamson 1, topped serpentine 1470 ft, 6⅝ inch csg set 1460 ft, total depth 1690 ft, completing as 10 barrel well. Smith and Bruns' Marburger 1, King & Millett sur, lcn.

BEE COUNTY—Grebin and Woods' Riggs 1, James Nowland sur, 6½ mi w Skidmore, 2 mi from Live Oak line, set surface cas, dr ahead. Alexander et al's McFall 1, 3 mi s Skidmore, dr 1365 ft. Mineral Oil Co.'s (Mauldin & Fisher) A. J. Kimball 1, Stephen Winship sur, 7 mi sw Pettus in Grayburg pool, cored three feet deeper to 3543 ft, resetting screen, made producer in sand at 3537-40 ft. J. M. Davis et al's Geo. Ray 1, J. H. Williamson sur, 1 mi s townsite, coring for sand at 3892 ft. J. S. Mauldin's Mauldin 1, in sw corner of Pettus townsite, C. A. Kerr sur, cored gas sand at 3859 ft (corrected depth). United Prod. Co.'s Ray 37, 1 mile e field in Willis A. Moore sur, dr 3118 ft in shale.

BEXAR COUNTY—Penn Oil Co.'s Pollok 1, J. W. Riall sur, Cooksey unitized area, 15 mi e San Antonio, abn as water well at 1420 ft, topped sand 1380 ft. Champ and Humble O&R Co.'s Chavez 1, near Elmendorf, abn 2633 ft in Edwards, topped at 2583 ft. Russell and Moore's A. O. Mills 3, A. Navarro sur, 10 mi s San Antonio on Somerset road, sd 938 ft. J. Morgan Russell's Price Story 1, A. Navarro sur, 10 mi s San Antonio on Somerset road, dr abt 1200 ft. Uechert et al's Palfrey 1, 7 mi se San Antonio near Brooks field, sd 1804 ft. Weilbacher and Brock's Ernest 1, J. Christopher sur, 2 mi n Somerset, sd 925 ft.

BLANCO COUNTY—Hardy Sitton's (formerly Lyles and Adams) Standeford 1, James Standeford sur, No. 155, 3½ miles nw Blanco City, prep to re-dr at 970 ft; McMillen 1, Benjamin sur No. 125, 2 mi w Blanco City, dr around 900 ft. Meeks et al's Walker 1, ne cor Noel Nixon sur, No. 23, 4 mi n Blanco City, dr 1120 ft. Forest Oil Co.'s (Rosenfield et al) Hohenberger 1, sur 94, sd 555 ft.

BROOKS COUNTY—The Texas Co.'s Allen Land and Cattle Co. 1, 7110-a San Antonita Grant, dr below 1800 ft. Howeth et al's Singer 1, sur 436, 400 e Humble's Singer 1, dr abt 1300 ft.

CALDWELL COUNTY—Mills and Chapman's McMahon 1, Pinchback sur, 6 mi se Lockhart, dr 2430 ft at last report, Rayor et al's Dunlop 1, near Luling top of Edwards 2511 ft, casing set on packer at 2145 ft, testing, total depth 2515 ft. Ralph Ogden et al's O. S. Alexander 1, 8 mi se Lockhart, sd 2338 ft, Edwards topped at 2330 ft.

DUVAL COUNTY — Humble O&R Co.'s Kohler 50, Kohler pool, sur 164, dr 6180 ft. S. J. Carpenter's Benavides 1, section 1, blk 28, Mesquite Grant, sand 1665 ft, now sd. O'Byrne et al's Weil Bros. 1, BS & F Syr Bi, 568, 7 mi sw S&O Pool, sd 1720 ft. Coffee et al's Jose Garza 1, center sur 49, Garza Irrigated Land Co., sd 900 ft.

GOLIAD COUNTY—Neuhaus Drlg. Co.'s Pettus 1 (formerly Southern Crude Oil Purchasing Co.) old well taken over, to be deepened.

GUADALUPE COUNTY—W. T. Walton's Zobrowoski 1, 500 ft s Guadalupe river, ½ mi n original Adams and Lysles Zobrowoski well, show gas 950 ft, dr ahead. Harry Bruner's Jim Sherril 1, Geo. Allen League, near Staples, fsh 678 ft. C. McGarity et al's August Wesch 1, H. M. Thompson sur No. 89, 2 mi n Marion, move on larger rig, total depth 800 ft.

HIDALGO COUNTY—Dayle L. Smith Oil Co.'s Fernandez 5, 21 mi w McAllen, sd 4026 ft.

JIM HOGG COUNTY—D. C. DeWitt's T. Gomez 1, sec 12, sd 200 ft. Magnolia Pet. Co.'s Juan V. Cuellar 1, El Peyote Grant, blk 92, W. A. Dannelly sub, sur 575, dr below 4400 ft. Peterman and Minahan (P&M Oil Co.) Palacios 1, sur 231, three mi s Randado field, sd 1360 ft.

KERR COUNTY—Herbert Oil Co. (Herbert and Herbert) J. D. Witt 1, W. H. Hamilton sur, sec 1923, Camp Verde district, dr 225 ft. Col. B. M. Hatridge's Duderstadt 1, (Crawford and Terrell) Reservation-Harper district, ru; Rischworth 1, (Neely & Balbert) sec 1459, 2 mi se Center Point, sd 117 ft. Evans and Sprinkle's Jeff Love 2, sw cor sec 1592, 2½ mi se discovery, spudded. Evans and Gant's Seiker and Mears 1, CCSD&RGNR Ry. sur, sec 1605, a mi ne discovery, dr 2200 ft. Chester A. Martin's J. E. Young 1, A. E. Bruce sur, sec 28, ne discovery spudded.

KLEBERG COUNTY—Barbee and Hunter's Finnegan 1, El Pasadizo sur, 7 mi s Kingsville, dr 1500 ft.

LA SALLE COUNTY — Fred W. Volz's Coleman 1, sur 514, blk 15, sd 40 ft.

LIVE OAK COUNTY — Burke Greis Oil Co.'s Geo. West 1, James L. Vaughan sur No. 57, 10 mi w Geo. West townsite, dr 3212 ft. Houston Oil Co.'s Cartwright sur, Sandman sur, Mt. Lucas field, cored sand 3554-65 ft, showed 250 ft oil on drill stem test in eight minutes, 9-inch casing set 3550 ft. Coquat et al's Hewitt 1, Thomas Adams sur, sec 5, set 10-inch at 54 ft.

McMULLEN COUNTY—Camp and Stanolind O&G Co.'s Murphy 1, 1½ mi ne Massey, 1, dr 2055 ft.

NUECES COUNTY—Gulf Coast Oil Co.'s Harrel 1, GC&SF sur, sec 311, blk 32, ¾ mi n main field, mov on rig from Dunn 8, prep to complete, casing set 4087 ft, sand, showing oil, 4095 ft. L. L. Smith, Inc.'s H. N. Hunter 1, H. B. Shepherd sur, Rincon del Osa Grant, ¾ mi ne main field, cored sand 4790-92 ft, showed oil and gas, now dr at 5110 ft. Saxet Oil Co.'s Dunn 8, Saxet field, abn 4277 ft, swabbed 100 bbls fluid, 90 per cent salt water. Houston Oil Co.'s Harrel 2, John E. Dunn sur, 312, 2 mi nw main pool, blew in wild at 2725-40 ft on May 19, still running wild; Morgan 2, cored sand 4794-97 ft, showed oil and gas, now dr 4980 ft.

REAL COUNTY — Gant and Kilgore and Eastland Oil Co.'s Dan Auld 1, CCSD&RGNR sur, sec 23, 3 mi sw Love well, sd 4007 ft, contract depth. Evans and Sprinkle's Haby 1, AB&M sur, 7 mi sw Love well, sec 175, dr 2100 ft, had oil show 1980 ft.

REFUGIO COUNTY — Bonnie View Oil Corp.'s Dammann 1, nw cor of sec 16, Bonnie View Ranch, cored oil sand 4159-75 ft, ratholing ahead from 3614 ft to make test. Humble O&R Co.'s O'Conner 1, lcn.

SAN PATRICIO COUNTY—Saxet Oil Co.'s White Point Dev. Co. 4, White Point field, drilled to 5750 ft, plugged back to 3305 ft, perforate casing at that depth. United Prod. Co.'s Mayfield 1, White Point, ru.

STARR COUNTY—B. B. Tips' Frank Doyono 1, sd 332 ft. Sacramento O&G Co.'s Seabury et al, sd 411 ft. Los Olmos Oil Co.'s Kelsey Bass 4, no rept, waiting on cement at 407 ft at last report.

VICTORIA COUNTY — The Texas Co.'s McFadden 3, dk. Houston Oil Co.'s Konrad 1, Beck Salt Dome, T&NO sur, n Victoria, dr 1060 ft. Westheimer et al & Simpson Fell Oil Co.'s Levi 1, dr 4212 ft. T. B. Slick Estate's McFadden 1, J. Barian sur, running liner and tubing, sand 3502-12 ft, showed for large gasser. United Prod. Co.'s McFadden 4-A, dr 2126 ft in sand.

WEBB COUNTY—Eugene Garner, Jr.'s, A. S. Billings 1, sur 71, lcn. Cole Pet. Co.'s (Carson) 2 (4) sur 1601, 12 mi e Laredo, dr 2000 ft.

ZAPATA COUNTY—No reports available.

TEXAS GULF COAST

ANGELINA COUNTY—R. D. Moore's Abney Estate 1, Tuinalty Sur., sd 1350 ft. Pollock Oil Co.'s Sessions 1, Garza Sur., sd 3200 ft.

AUSTIN COUNTY—O'Hara et al's Schrader 1, Hacienda Sur., fshg. 5880 ft. Empire's Munze 1, San Felipe, abn 6555 ft. Pareson & Cafferkey's Scholeckte 1, Fitzgibbons Sur., sd 1100 ft.

BELL COUNTY—Vilas Oil Co.'s Whittington 1, Davilla Sur., lcn. Meldon Oil Co.'s Edds 1, 6 mi. n Temple, sd 400 ft. Winona & Elswick 1, 9 mi se Temple, sd 1890 ft. O. O. Alford's Spankle 2, lcn.

BRAZORIA COUNTY—United Synd's Speer 1, 3 mi n Danbury, stdg 1865 ft. D. C. Wellock's Hammon 1, Damon Mound, dr 500 ft gumbo. The Texas Co., Belcher 1, Manvel, dr 1200 ft gumbo.

BURLESON COUNTY — Doran et al's Sparks 1, fsh 1300 ft. Mid South Oil Co.'s Duckworth 1, 2 mi e Clay Station, dr 3070 ft sand. March & Son's Marek 1, dr 1540 ft shale. Reynolds Oil Co.'s Harris 1, 4 mi se Creisman, sd 400 ft.

CALHOUN COUNTY — The Texas Co.'s Smith 1, Chocolate Creek, dr 5690 ft shale and lime.

CHAMBERS COUNTY—Pure's Mayes 13, Lost Lake, dr 5250 ft shale and lime.

COLORADO COUNTY — United N. & S. Dev. Co.'s Lockwood 1, abn 5585 ft.

CORYELL COUNTY—Coryell County Oil Corp.'s Davidson 1, Roberson Sur., lcn.

FAYETTE COUNTY — Elam & Reynold's Florence 1, dr 2100 ft shale.

FORT BEND COUNTY—Cullen & West's Lockwood 1-A, Thompson, ru. Telschaw, Cady

et al's Blakely 1, Blue Ridge, dr 9270 ft shale. Gulf's Moore 29, Moores Field, comp for 400 bbls. 4169 ft.

GALVESTON COUNTY—Yount-Lee's Cade 20, High Island, ru; Cade 21, dr 4100 ft shale and lime.

GRIMES COUNTY—Rianjo Oil Co.'s Cuthrell 2, 3 mi e Carlos, dk.

HARDIN COUNTY—Plummer & McDaniels' Reed 1, 6 mi e of Sour Lake, dr 1300 ft gumbo and lime.

HARRIS COUNTY—Hattie Baldwin's Krahn 1, 3 mi n Cypress, dr 200 ft sand. Baldw'n et al's Fritz 1, 3 mi n Cypress, set 8-in cas 450 ft. Humble's Minnetex 5, ru; Minnetex 6, dr 5000 ft shale.

HILL COUNTY—Hilltex Oil Co.'s Weatherly 1, Weatherly Sur., sd 4000 ft. H. H. Heedie's Gitmore 1, Navarro School Land Sur., sd 870 ft. C. Houseman's Griffith 1, Waddell Sur., sd 1430 ft.

HOUSTON COUNTY — A. E. Winfree's Hodges 1, Russell Sur., dr 2400 ft prep to test.

JACKSON COUNTY — Chicago Gulf Co.'s Rodgers 1, Edna, dr 3900 ft shale.

JEFFERSON COUNTY—Humble's McFadden 1, 8 mi e Big Hill, abn 7663 ft. The Texas Co.'s Pipkin 4, Big Hill, abn 5910 ft.

LAVACA COUNTY—F. P. Zoch's DeBard 1, lcn.

LEE COUNTY—Wheeler et al's Stolts-Frede 1, 3 mi nw Lexington, sd 1988 ft. Burt et al's Sanders 1, sd 3120 ft.

LIBERTY COUNTY—Cranfill & Reynolds' Davis 7, dr 5220 ft shale. Gulf's Boyt 14, lcn. Harrison Oil Co.'s Jones 2, dr 1820 ft gumbo.

MATAGORDA COUNTY—Cockburn et al's Hawkins 3, Shepherds Mott, dr 4190 ft shale. Empire's Boker 1, Citrus Grove, dr 6415 ft shale.

MONTGOMERY COUNTY—Lowrie & Young's Sunday 1, 4 mi w Pinehurst, dr 2750 ft sand. Mike Hogg's Hunt 1, 3 mi sw Conroe, dr 4160 ft shale. Turner-Kelsey's Lieberman 1, 2½ mi w Conroe, dr 4360 ft Jackson.

ORANGE COUNTY—Jefferson Prod. Co.'s Bland 1, Orange, lcn.

POLK COUNTY—Freeman et al's Freeman 2, 4 mi se Leggett, dr 3100 ft shale.

TYLER COUNTY—King Oil Co.'s Caswell 1, sd 1250 ft. Texas Sun Co.'s Wilson 3, dr 4930 ft sand and shale. L. H. Wentz's Mann 1, 2 mi sw Colmesneil, dr 1750 ft sand and shale.

WASHINGTON COUNTY — Penn-Tex Oil Co.'s Kamas 2, Brenham, dr 3020 ft shale. Sun's Carroway 5, Gay Hill, comp for 35 bbls. 1380 ft; Janner 6, dr 830 ft shale; Janner 5, comp for 40 bbls. 1215 ft. Brenham Salt Dome Test Co.'s Kramer 1, Brenham, dr 1980 ft shale. Yegua Oil Co.'s Graves 1, 3 mi n Independence, dr 1920 ft shale.

WHARTON COUNTY—H. H. Givan's Hudgins 3, 1¾ mi e Hungerford, dr 2300 ft gumbo. Rose Texas Oil Co.'s Floyd 1, Austin Sur., lcn.; Floyd 2, Austin Sur., lcn.

MISSISSIPPI

CLAY COUNTY—Ohio Oil Co.'s Cantrell 1, ne ne 16-15-5e, elev 270 ft 13⅜ cas 1389 ft 9⅝ cas 2929 ft dr hd gray sand 3938 ft.

CHICKASAW COUNTY—Hightower & Golsan's Fleming 1, 20-13s-3e, sd wo 6-in cas td 1505 ft.

COVINGTON COUNTY (Collins Dist).—Gulf Ref. Co.'s Pope 1, 35-8n-16w, dr Wilcox 3260 ft (4500 ft test).

JASPER COUNTY, (Bay Springs Dist.)—Bay Springs Pet. Inc's J. H. Keyes 1, nw ne 21-2n-10e, 15½ cas 104 ft top. Cane River 1090 ft top Wilcox 1529 ft dr Wilcox 1880 ft.

JEFFERSON COUNTY — M. M. Stokes' School Board 1, 14-10n-2w, mov in rig.

MONROE COUNTY, (Amory Dist.)—Amory Dev. Co.'s Bourland 1, sw ne 2-15-19, ta in brown sand 3007 ft P. J. McAlpine's Cowart 1, ne sw 2-12-19, 10-in 694 ft 8¼ cas 1276 ft 6⅝ 2208 ft dr black shale 2362 ft. Associated Royalties' School Board 1, sw ne 16-15-17, ta 60 ft.

NOXUBEE COUNTY, (Macon Dist.)—Geo. R. Thompson's Donahue 1, 25-16n-17e, elev. 280 ft materials.

RANKIN COUNTY, (Jackson Dist.)—Love et al's Muse 1, se se 32-7n-4e, 12½ cas 600 ft top black shale 3740 ft sd in black shale and bldrs arr change to heavier rig to go to 5000 ft td 4000 ft. Moore 1, se nw 28-6-2e, ta 900 ft. Atkinson et al's Valentour 1, nw nw 18-5-2e, rig.

SCOTT COUNTY—Culley et al's Owen 1, se ne 2-8n-9e, dk.

WARREN COUNTY, (Vicksburg Dist.)—Eagle Lake O&G Co.'s Kiger 1, sw se 9-18n-2e, dr sandy shale 1485 ft. Vicksburg O&G Co.'s Dornbusch 1, sw ne 8-18n-5e, ta 1600 ft.

WINSTON COUNTY, (Louisville Dist).—Miss. Drilling Co.'s Scarbrough 1, nw nw 15-13n-14e, base red beds 2793 ft coring lime, sand and shale 3142 ft.

YALABOUSA COUNTY, (Water Valley Dist.)—J. D. Collett et al's Blackmer 2, sw nw 14-11s-4w, 12½ cas 103 ft 8⅝ cas 2428 ft dr hd slate 3158 ft.

ALABAMA

MADISON COUNTY—Tennessee Valley O&G Co.'s Fee 4, 1-4s-2e, no report.

SUMTER COUNTY, (Livingston Dist.)—Forked Lightning O&G Co.'s Nixon 1, sw ne 30-20-2w, dk.

WASHINGTON COUNTY—Hobson et al's Wilson 1, 27-7-1w, 10-in 130 ft dring 8-in pipe below 1000 ft. Hobson Bros. 1, 9-8-2w, ta 1450 ft. Oscar Brown's U. S. Land & Cotton 2, 25-3-2w, sd 700 ft.

TENNESSEE

DECATUR COUNTY—Chester County O. & G. Co.'s Montgomery 1, dr oolitic lime 2282 ft.

LOUISIANA GULF COAST

BEAUREGARD PARISH—Beauregard G. & O. Co.'s Cochran 1, Merryville, dr 2830 ft gumbo.

CALCASIEU PARISH — Wilfred Lahay's Jardell 1, 2 mi ne Vinton, as 3260 ft. Vacuum's Miller 12, Lockport, dr 6450 ft shale; Miller 32, lcn. Yount-Lee's Miller 2, Lockport, dr 6350 ft hard sand. J. O. Davis' Ind. Lbr. Co. 1, 8 mi n Starks, stdg 6568 ft. Gulf's Lutcher-

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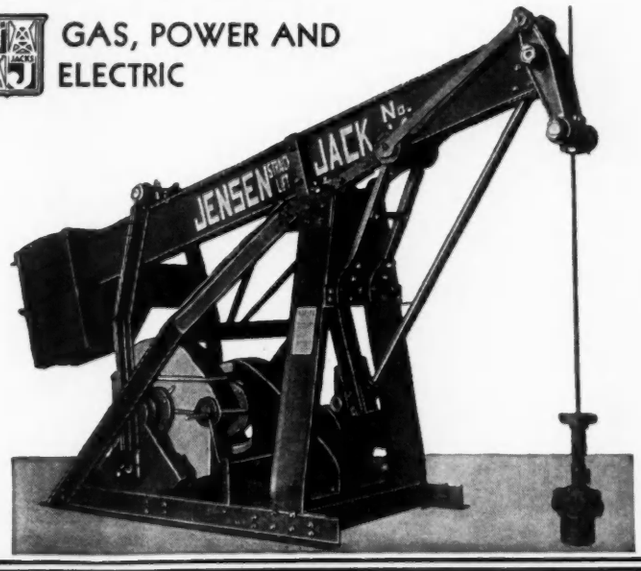

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Moore 27, Starks, comp. 40 bbls 500 ft. Union Sulphur Co.'s Fee 765, Sulphur, pulling scr to dd, 4455 ft; Fee 767, dr 1740 ft rock, set 12½ inch cas.

CAMERON PARISH—Vacuum's Cameron Meadows 2, Cameron Meadows, dr 4195 ft gumbo. R. E. Seiss' Vincent 2, Hackberry, dr 1980 ft shale. Magnolia's Sweet Lake Land Co. 2, ru and rebldg dk.

IBERIA PARISH—Jefferson Lake Oil Co.'s Lake Peigneur 11, stdg 869 ft; Lake Peigneur 12, abn 840 ft.

IBERVILLE PARISH—Standard of La.'s Gay 1, Bayou Choctau, hit hard oil sand 4328 ft; Schwing 6, dr 1500 ft gumbo; Schwing 7, dr 550 ft gumbo; Wilbert 7, dr 70 ft clay; Wilbert 9, Bayou des Glaise, dr 3830 ft sandy lime.

PLAQUEMINES PARISH—Humble's Cockrell Moran 4, dr 300 ft sand.

ST. JAMES PARISH — Convent Oil Co.'s Jacobs 1, dr 2400 ft gumbo.

TANGIAPAHOE PARISH—Joan Dev. Co.'s Superior Oil Co., ta 3010 ft.

TERREBONNE PARISH—The Texas Co.'s Bay St. Elaine 1, dr 5200 ft water sand; Caillou Island 6, show of oil 4486 ft; Dog Lake 4, dr 4520 ft sandy lime; Four Isle 5, dr 600 ft lime; Lake Barre 6, dr 3800 ft anhydrite; Lake Barre 11, dr piling; Lake Barre 13, dr 3550 ft lime.

VERMILION PARISH — Pure's Alliance Trust Co. 1, Gueydan, dr 2750 ft sand and shale.

WEST FELICIANO PARISH — Putnam Synd. Co.'s Como Plantation 2, dr 1740 ft sand. Como Oil & Dev. Co.'s Wood 2, lcn.

NORTHERN LOUISIANA

Completions

CONCORDIA PARISH—			
United Gas Pub. Serv. Co., Hughes 1, 49-8-10e		*	1740
SABINE PARISH (Zwolle)—			
W. M. Coates, R. L. Gay 2, 1-7-12	150		2297
Jordan Drilling Co., La. Long Leaf 2, 3-7-11	50		2455
Sabine Royalties Co., Inc., Skinner 1, 5-8-11		*	2654

BIENVILLE PARISH — Ark. La P. L. Co.'s Gayoso Co., Inc., 1, nw sw 14-16-10, 15½ cas 112 ft, dr hd sandy shale 2382 ft.

BOSSIER PARISH — Andrews & Davlin's Nattin 1, 15-22-14, sd 2950 ft. Rambaugh et al's Allison 1, 10-19-13, sd 1100 ft. Flint River Oil Co.'s DeMoss 1, se nw 22-22-13, 12½ cas 236 ft, small show oil and gas in ds test 2612-30 ft, sd 2702 ft. Hankins et al's Newell 1, ne ne 12-19-11, sd 725 ft (Upper Trinity test). H. I. Morgan's Kendricks A-13, nw se 22-19-11, first hole had gas blowout, ran wild junked at 1737 ft, skidded over, sp 10-inch 278 ft, dr 555 ft (Upper Trinity test). D. L. Perkins et al's Ardis 1, ne sw 13-15-11, sp 10-inch 120 ft; Glover 1, se ne 23-15-11, lcn.

CADDO PARISH—Pelican Nat. Gas Co.'s Cooper 1, 29-18-14, 15¼ cas 200 ft, 12½ cas 1129 ft, did not make ds test at 2958 ft, dr lime 2994 ft (5500 ft test). United Gas Pub. Serv. Co.'s Smith 1, nw ne 33-23-16, 12½ cas 471 ft, dr lime 3032 ft (5500 ft test).

CATAHOULA PARISH—National Drilling Co.'s Marsh McMillian 1, 26-9-6e, 6⅝ cas 2796 ft, tested sw, sd 3097 ft.

CALDWELL PARISH—Monroe Pet. Corp.'s Burton 1, 36-12-3e, sd cur titles 2986 ft. Carter Bell et al's Taylor 1, ne se 17-14-4e, rig.

CLAIBORNE PARISH — Leue Oil Co.'s Kinder 1, sw se 2-21-7w, 12½ cas 152 ft, dr 1900 ft.

CONCORDIA PARISH—United Gas Pub. Serv. Co.'s Hughes 1, 49-8n-10e, 12½ cas 198 ft, tested dry through ds 1482 ft, dry abn, td 1740 ft.

DE SOTO PARISH—Rellitt O&G Co.'s Cannon Hrs. 1, nw ne 12-11-16, 10-inch 60 ft, dr shale 1015 ft. W. H. Weichert's H. Smith 1, 31-14-15, top gas sand 1653 ft, top chalk 1901 ft, sd 2350 ft. E. T. Oakes' Johnson 1, 3-13-15, 10-inch 80 ft, base Midway 1378 ft, gas show in Nacatosh, dr chalk 1672 ft. Walters &Nicholson's Jim Guy 1, 3-11-13, rig.

NATCHITOCHES PARISH—C. M. Talley et al's Talley 1, 29-11-10, tested dry, show oil in bro sand and shale 1256-69 ft, dry 1380 ft, sd wo. W. M. Coates et al's Collins 1, sw nw ne 28-9-10, base Midway chalk 2612 ft, base hd lime 4039 ft, tested 15 joints mud and sw 4020-91 ft, ta 4091 ft. J. W. Cooper et al's Cooper 1, 35-11-10, sd 3156 ft; Cooper 2-A, 35-11-10, top chalk 1400 ft, sd 1515 ft.

RED RIVER PARISH—Mack Jourdan Oil Co.'s Lockett 1, 32-13-10, 10-inch 90 ft, dr 1100 ft.

SABINE PARISH—J. C. Walton's Sabine 1, ne nw 11-7-12, 6⅝ cas 2119 ft, sd 2376 ft. Lacey Prod. Co.'s Cooper 1, 30-8-11, top chalk 2306 ft, 6⅝ cas 2270 ft, wosr, td 2620 ft. Houston Sabine Prod. Co.'s Sabine 1, 36-8-12, 10-in 85 ft, cemtd 6-inch 2238 ft. J. J. Kean's Belton 1, se sw ne 31-9-13, elev 232.7 ft, top Nacatosh 1590 ft, top marl 1596 ft, claim core showing oil 1590-1600 ft, cemtd 8¼ cas 1590 ft, td 1605 ft. H. W. Perritt's Bowman-Hicks 4, se ne 2-7-12, cemtd 6-inch 2203 ft; Boring 1, ne nw 11-7-12, 10-inch 85 ft, 6-inch 2238 ft. Bowman-Hicks 5, sw ne 2-7-12, lcn. A. H. Thames' Edwards Est. 1, ne se 8-8-13, 10-inch 100 ft, sd 1200 ft. R. L. Gay, Tr.'s, Long-Bell A-1, ne nw 10-8-13, 12½ cas 105 ft, top marl 1897 ft, base marl 1950 ft, dr 3200 ft. Jordan Drilling Co.'s La. Long Leaf 2, sw se 3-7-11, 10-inch 103 ft, 6⅝ cas 2350 ft, gauged 50 bbls daily flowing, td 2455 ft; McCormick 1, sw se 2-7-11, lcn. Gautier et al's Meshell 1, se nw 30-8-12, top marl 2224 ft, sd 2260 ft. Ohio Oil Co.'s Bowman-Hicks 9, nw se 35-8-12, lcn; Bowman-Hicks 10, sw se 35-8-12, lcn; Bowman-Hicks 11, sw se 2-7-12, lcn. Sabine Royalties Co. Inc.'s, Bill Hill 1, nw ne ne 5-7-11, 10-in 105 ft, top marl 2217 ft, 6-inch 2230 ft, deepening with CT, td 2530 ft; Bill Hill 2, sw se se 32-8-11, sp dr 50 ft; Skinner 1, se sw ne 5-8-11, 6⅝ cas 2253 ft, top marl 2270 ft, dry abn in chalk, td 2654 ft. Diffie & Barrett's Lites 1, 34-8-11, 10-inch cas 105 ft, sd. Hawkins et al's Moran 1, se ne 1-7-11, 10-inch 100 ft, 6-inch 2428 tf, 400 ft oil in hole, wosr, td 2620 ft. Hawkins & Antoon's Newton 1, 1-7-11, first hole junked 1550 ft, sp new hole 10-inch 90 ft, dr 400 ft. Lyons & Neely's Byrd 2, 1-7-11, 10-inch 100 ft, 6-inch 2273 ft, blg to test 1200 ft oil hole, td 2480 ft; Duggan 1, nw se 14-7-11, dk. pat. Texas Co.'s De Latin 1, 10-inch 95 ft, cemtd 6⅝ cas 2330 ft, td 2333 ft. W. M. Coates' R. L. Gay 2, 1-7-12, 6-inch 2186 ft, top marl 2202 ft, top chalk 2290 ft, gauged 150 bbls oil day, td 2297 ft; McNeely 1, 14-7-11, 10-inch 90 ft, dr 2190 ft; Williams 1, 23-7-11, 10-inch 85 ft, dr 2300 ft. Stovall Drilling Co.'s Nulton 1, 1-7-13, 10-inch 100 ft, dr 2300 ft. Sabine Prod. Co.'s Pearce 2, se nw 10-7-11, 10-inch 100 ft, 6-inch 2320 ft, top marl 2330 ft, blg to test, td 2425 ft. Eddie Self's Jacobs 1, sw se 1-7-11, 10-inch 105 ft, 6-inch 2416 ft, blg to test 500 ft oil in hole, td 2472 ft. L. K. McGuffin's Bush 1, nw sw 1-7-11, sp 10-inch 95 ft, dr 350 ft. Geo. Pipes, Tr.'s, Byrd 1, sw nw 1-7-11, 10-inch 95 ft, cemtd 6-inch 2397 ft. Zeke Lohman's McCormick 1, ne sw 2-7-11, rig. A. F. Tarver's Cutrer 1, nw nw 12-7-11, 10-in 80 ft, fsh ds 1500 ft. Ben Merritt, Tr.'s, Byrd 2, ne sw 1-7-11, sp 10-inch 80 ft. Roy Baker's Sabine 1, ne nw 11-7-12, dk.

TENSAS PARISH—Nick Barbare's Mutual Realty Co. 1, ne ne 36-11-9e, lcn. A. R. Willis' Curry 1, 39-11-12, dr 3545 ft (corrected depth).

WEBSTER PARISH—D. M. Coyle's Frazier 1, ne se 27-23-11, dk.

WEST CARROLL PARISH — United Gas Pub. Serv. Co.'s Pioneer Cooperage 1, 29-21-8e, 15½ cas 167 ft, 10-inch 867 ft, dr 2603 ft.

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ARKANSAS

Completions

COLUMBIA COUNTY—
Modisette et al, Sharkles 1, 33-16-19 * 2356

UNION COUNTY—
Marine Oil Co., Union Sawmill 1, 3-18-13 . ..... 170 3551

CHICOT COUNTY—W. R. Smyth's Lytle 1, 31-18-3, ta 2925 ft.

CLAY COUNTY—S. C. Jeffus, Tr.'s, Underwood 1, nw ne 4-20-8e, sd repr rig 1252 ft.

CLEBURNE COUNTY—Donnell et al's Fee 1, 33-11-9, sd 3740 ft.

COLUMBIA COUNTY—Kendall Oil Co.'s Fullenwider & Kitchen 1, ne ne 13-17-22, 12½ cas 75 ft, claim oil sand 489-502 ft, sd 778 ft. Modisette et al's Sharkles 1, sw ne 33-16-19, 10-inch 42 ft, 8-inch 300 ft, top Nacatosh 1932 ft, dry abn in sandy shale, td 2356 ft.

DALLAS COUNTY—Jno. James, Tr.'s, Fordyce Lbr. Co. 1, ne nw 11-9s-15w, 10-inch 175 ft, sd 2520 ft. E. C. Brewer, Tr.'s, Hillman 1, se ne 20-10-13, 10-inch 138 ft, sd in white sand 2869 ft.

GRANT COUNTY — Spann & McClung's Sarah Page 1, sw nw 3-3-12, ur 7-inch cas, td in soft white sand 1024 ft.

HOT SPRINGS COUNTY—Starr Oil Co.'s (formerly Jno. Watkins, Tr.), Cunningham 1, ne ne 11-5-16, dr hard rock 1058 ft.

JOHNSON COUNTY—Blackwell O&G Co.'s Wyver 1, 21-8-23, ta 5600 ft.

LA FAYETTE COUNTY—Crawford Drilling Co.'s Vaughan 1, 25-19-25, rig. McIver et al's Hattle 1, nw ne 1-20-26, 12½ cas 115 ft, sd 2520 ft. Smitherman & McDonald's Rogers 1, sw ne 9-15-22, 12½ cas 109 ft, sd 2035 ft.

LAWRENCE COUNTY—Marguerite Dev. Co.'s Broadway 1, 31-17-1, sd 45 ft.

LINCOLN COUNTY—L. B. Cook, Tr.'s, McGehee Pltg. Co. 1, ne sw 5-8s-7w, 12½ cas 90 ft, dr sandy shale 1326 ft.

LITTLE RIVER COUNTY—Fay Roberts Oil Co.'s Russell 1, nw nw 25-12-29, lcn.

LOGAN COUNTY—M. W. Greesom's Parks 1, 21-8-24, sd 1309 ft. J. H. Flowers' White 1, 13-5-26, sd 3610 ft.

MILLER COUNTY—E. & F. Oil Co.'s E. L. Beck 1, 36-15-26, 6⅝ cas 2792 ft, 4½ cas 2957 ft, sd 2968 ft. J. D. McRae's Smith 1, nw se 28-15-26, dk. W. E. Noel et al's Dickson 1, nw ne 11-20-27, lcn.

OUACHITA COUNTY—Copenhaver et al's Elliott 1, se se 11-15-17, 6-inch 2185 ft, tested dry sd 2210 ft.

PIKE COUNTY—Henderson et al's Tilyou 1, 26-8-24, show heavy oil 567 ft, ta in lime rock 2920 ft. E. R. Henderson's Lee 1, sw se 31-8s-24w, 10-inch 198 ft, dr hd rock 716 ft.

SCOTT COUNTY — Heavener O&G Co.'s Reser 1, 36-4-26, fsh cas, td 1536 ft. Waldron O&G Co.'s J. G. White 1, sw nw 17-3n-29w, 10-inch 225 ft, sd wo cas, td 1860 ft (second hole).

SEBASTIAN COUNTY—M. W. Greesom's Spears 1, 9-7-29w, sd after testing sw, td 2515 ft.

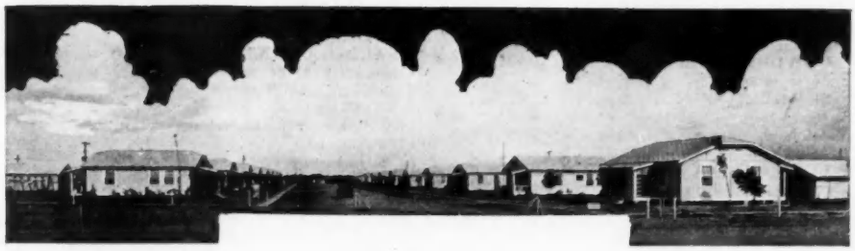
SEVIER COUNTY—Tri-State O&G Co.'s Bank of De Queen 1, s½ sw 34-8s-32w, rig.

UNION COUNTY — Southern Prod. Co.'s Wingfield 1, se nw 16-19-15, 10-inch 103 ft, sd 2608 ft. Lion O. R. Co. et al's Guy P. Hayes A-9, sw ne 4-16-15, 12½ cas 270 ft, coring hard blue sandy shale 3865 ft (5000 ft test). Wilson & Chapman's Hadley 1, ne sw 3-18-13, 600 ft fluid in hole, 30 per cent sw, td 3570 ft; Atkins 1, sw ne 3-18-13, sp dr 50 ft; H. Norman 1, se ne 3-18-13, lcn; Doty A-1, ne se 3-18-13, lcn; Doty B-1, ne se 3-18-13, lcn. Marine Oil Co.'s P. Winn A-2, nw nw 11-18-13, 10-inch 276 ft, 6⅝ 3579 ft, swabbed 80 per cent sw, ta 3586 ft; Union Sawmill 1, se se 3-18-13, 10-inch 236 ft, 7-inch 3532 ft, flowing 170 bbls pipe line oil daily through 3-inch tubing, td 3551 ft. Marine Oil Co.'s W. B. Thompson D-1, sw se 3-18-13, mov in rig.

WASHINGTON COUNTY—Taylor et al's Runny 1, 1-13-29, sd 1702 ft. Lincoln Lease Holding Synd.'s Townsite 1, 30-15-32, ta 1500 ft. C. H. Willoughby's Jones 1, 34-16-30, sd 2150 ft. O'Hara & Shetterley's Boyd 1, 12-16-32, ta 650 ft. Delbert Graves' Cunningham 1, 14-15-32, sd in gray sand 602 ft.

VAN BUREN COUNTY — J. S. Martin's Scanland 1, 5-9-13, sd 50 ft.

YELL COUTY—T. Luckett's Balcon 1, 36-7-12, sd while fsh cas, td 5710 ft.



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NIKROME SHAFTS

KANSAS

MORTON COUNTY — Hydraulic Oil Co., State land 1, nw se, 22-34-43w, sd 3460 ft.

COWLEY COUNTY—Fisher et al, Hunt 1, c sw se se 11-34-3e, ru and sd.

SUMNER COUNTY—Spencer et al, Porter 1, ne sw se se 11-34-3e, spd. Otstot et al, Warlow 2, c se nw se, 22-33-3w, td 3035 ft, ur 8-inch.

COWLEY COUNTY — Roth & Farrout, Reidy 1, c sw nw ne, 8-32-4e, td 1040 ft, sd.

HARPER COUNTY—Beeler et al, Bear 1, c ne, 21-31-6w, td 1830 ft sd.

FORD COUNTY—Carter et al, Community-Everett 18, c ne, 22-29-21w, (6000 ft test), dr 4363 ft.

SEDGWICK COUNTY—Buck et al, McNanaman 1, c ne nw nw 2-20-1e, 10-inch 2301 ft, hfw 2295-2370 ft, td 2440 ft, sd.

FORD COUNTY—Swain et al, Henthorn 1, c nw, 21-25-24w, 5-inch 4645 ft, sd 5105 ft.

STAFFORD COUNTY—Rosenthal, Stanolind & Amerada, Gray 1, c ne, 11-34-13w, 10-in 2201 ft, dr 1415 ft.

MARION COUNTY—Maidwell, La Master 1, nw c, 31-22-4e, td 650 ft.

COFFEY COUNTY—Hegberg et al, Kroft 1, se sw se, 30-22-14e, 10-inch 818 ft, sd 1565 ft. Roberts et al, Hay 1, sw se nw 32-22-15e, td 1250 ft, sd abn.

BARTON COUNTY—McCool et al, Isern 1, c sw se ne 12-20-11w, td 1600 ft, sd.

RUSH COUNTY—Dewey & Mitchell, Greenwalt 1, c sw, 17-19-16w, 3330-40 ft hfw, td 3445 ft, ur 6-inch.

BARTON COUNTY—Skelton Oil, Ott 1, c se se, 16-19-14w, td 2252 ft, ur 8-inch.

RICE COUNTY—Solar Oil, Zink 1, se nw 3-19-10w, (3400 ft sil. l. test), dr 560 ft. Deitrick & Langston, Purcell 1, nw c, 33-19-9w, td 1574 ft, dr up ur lug.

CHASE COUNTY—Kline et al, Elliston 1-A, c se se, 21-19-6e, sd 585 ft.

BARTON COUNTY—Syndicate Oil, Boertz 1, c nw se ne, 13-18-12w, td 2450 ft, sd.

RICE COUNTY — Allison & Fitzwilliams, Blake 1, ne nw, 9-18-10w, spd. McFadden & Shell, Jennings 1, c sw ne nw 29-18-6w, pb to SG 1130 ft, sd.

CHASE COUNTY—Borden et al, Atkinson 1, nw se, 18-18-7e, machine.

NESS COUNTY—Gypsy, Coleman 1, c sw ne, 25-17-25w, top sil. l., 4709 ft, dr 4762 ft.

MORRIS COUNTY—Urschell et al, Bersuch 1, c nw se nw, 10-17-7e, ru and sd.

ELLSWORTH COUNTY — Alladin et al, Stoddenberg 1, c sw, 22-15-10w, 10-inch 2062 ft, td 2265 ft, wocs.

SALINE COUNTY—Stanolind et al, Martin Community 1, ne se se, 3-17-3w, 3298-3300 ft, dr 3467 ft, 400 ft oil in hole.

MORRIS COUNTY—Hankenson et al, Cessnum 1, sw se 24-16-9e, td 2260 ft, sd.

FRANKLIN COUNTY—Fields et al, Usher 1, se c 35-16-17e, sd 400 ft.

ELLSWORTH COUNTY—Milton et al, Kaster 1, se ne, 6-14-9w, top Oswald 2819 ft, hfw 2985 ft, td 3018 ft, ur 6-inch. Hershey et al, Schaltz 1, c ne, 9-14-8w, dr 2460 ft.

OSAGE COUNTY—Riggs-Smith, Wood 1, c se nw 31-14-15e, 10-inch 1050 ft, sd.

RUSSELL COUNTY — Austin Drlg. Co., Rockefeller 1, se c 6-13-12w, 3320-25 ft, hfw, td 3374 ft, sd.

SALINE COUNTY—Twin Mounds Oil Co., Weis 1, c w½ ne nw, 30-13-4w (owd) 19-inch 1010 ft, sd 2710 ft.

DICKINSON COUNTY—Severs et al, Livingood 1, ne sw 13-13-2e, sd 3850 ft.

RUSSELL COUNTY—Gilbreath et al, Bratton 1, c ne, 33-11-13w, 3132-36 ft so, td 3260 ft, sd.

GRAHAM COUNTY — Schleimeyer et al, Clark 1, c sw ne ne, 11-9-25w, 6-inch 4417 ft, dr 4440 ft.

CLAY COUNTY—Nebraska Oil, Tivier 1, sw c, 19-8-9e, sd 2700 ft.

SHERIDAN COUNTY — Flo et al, Shoemaker 1, se sw sw, 27-27-26w, 10-inch 1178 ft, dr 2240 ft.

ROOKS COUNTY—Empire, Holsman 1, c sw ne sw, 17-7-20w, td 3597 ft, rng 5 inch.

WASHINGTON COUNTY—Sincox, Penwell 1, nw se nw, 16-3-3e, sd 1720 ft.

RAWLINS COUNTY—Danciger et al, Unknown 1, sw c, 3-2-35w, 6-inch 2995 ft, sd 3150 ft.

OKLAHOMA

ALFALFA COUNTY—T 27n, R 11w, Sec. 12, Smith Bros., Forbes 1, ne c se nw nw, sd 1420 ft.

KAY COUNTY—T 27n, R 2e, 9, Mummer et al, Sornick 1, nw c se, hfw 2070-2170 ft sd 2700 ft. T 27n, R 1w, Sec. 32, Boucher et al, Jefferson 1, ne c sw, sd 3502 ft.

HARPER COUNTY—T 25n, R 20w, Sec. 12, Empire, Bruce 1, sw c ne ne sw, sd 7936 ft.

GRANT COUNTY—T 25n, R 4w, Sec. 22, Cowden, Collmer 2, ne c se ne sw, sd 5640 ft lost tools.

ALFALFA COUNTY—T 24n, R 11w, Sec. 14, J. V. Bailey et al, Acre 1, c sw ne, show gas 5298-5303 ft.

GARFIELD COUNTY—T 24n, R 6w, Sec. 9, Pulse & Beamer, White 1, se c nw, sd 5850 ft.

NOBLE COUNTY—T 21n, R 1e, Sec. 12, Barnsdall et al, Miksch 1, nw c sw, sd 4926 ft.

BLAINE COUNTY—T 19n, R 10w, Sec. 13, Washoma Pet. Co., Phillips 1, c nw sw, sd 4600 ft.

LOGAN COUNTY—T 18n, R 3w, Sec. 33, Healey et al, Quier 1, se c sw, sd 3970 ft.

KAY COUNTY—T 28n, R 3e, Sec. 24, Summitt Drlg. Co., Hays 1, nw ne nw, show oil 3185-3208 ft sd 3250 ft.

PAWNEE COUNTY—T 23n, R 5e, Sec. 15, Cochran et al, McFadden 1, ne c sw, rig. T 22n, R 5e, Sec. 2, Sherry et al, Milsap 1, se c sw, sd 1750 ft. T 20n, R 5e, Sec. 6, W. A. Rookstool, Berry 1, nw ne sw, sd 1951 ft show gas.

LINCOLN COUNTY—T 13n, R 6e, Sec. 8, Atlantic et al, Beebee 1, sw ne sw, lcn. T 13n, R 6e, Sec. 9, Mid-Continent et al, Lillie 1, ne c se, ¶6 4035-68 ft dr 4205 ft.

OKFUSKEE COUNTY—T 12n, R 10e, Sec. 3, Shepperd et al, Shepperd 1, se nw sw, sd 3690 ft.

PITTSBURG COUNTY—T 9n, R 16e, Sec. 32, Pattison et al, McDuff 1, sw nw se, show gas 5654-64 ft, dr 5712 ft. T 8n, R 14e, Sec. 14, C. O. Cannady, Smith 1, sw c ne nw nw, rig and tools. T 7n, R 15e, Sec. 5, C. O. Cannady et al, Travis 1, c sw ne, rig.

LATIMER COUNTY—T 6n, R 10e, Sec. 16, P. English, Weaver 1, c nw se, sd 1542 ft.

OKLAHOMA COUNTY—T 12n, R 4w, Sec. 17, C. F. Cuniff Trustee, St. Joseph 1, sw c ne sw se, sd 6700 ft.

SEMINOLE COUNTY—T 10n, 6e, Sec. 19, Bunte et al, Bruner 1, se c nw, rig.

POTTAWATOMIE COUNTY—T 8n, R 3e, Sec. 21, Droppleman et al, Jones 1, se c nw, cored show oil 4675 ft dr 4865 ft.

SEMINOLE COUNTY—T 7n, R 7e, Sec. 15, Magnolia, Powell 1, nw sw se, td 4634 ft lost hole abd.

ROGER MILLS COUNTY—T 12n, R 24w, Sec. 23, Ute Oil Co. et al, Williams 1, c sw, dr 4915 ft. T 11n, R 26w, Sec. 4, J. J. Rook and Palmer Davis 1, c nw ne (owd) sd 2960 ft.

CANADIAN COUNTY—T 10n, R 6w, Sec. 1, J. V. Bailey, Robinson 1, c ne nw, sd 150 ft.

WASHITA COUNTY—T 8n, R 19w, Sec. 29, Snodgrass et al, Blocker 1, nw c, sd 1875 ft. T 8n, R 18w, Sec. 21, Burns & Prince, Dock 1, sw c, sd 1050 ft.

GREER COUNTY — T 7n, R 22w, Sec. 1, Good & Dowell, Cliffel 1, nw c, sand 1462-1501 ft sd 1745 ft. T 7n, R 21w, Sec. 23, H. A. French, Murphy 1, sw nw se, sd 1654 ft.

STEPHENS COUNTY—T 1n, R 8w, Sec. 25, Rose Southard, McKinney 1, ne c sd 1063 ft.

HUGHES COUNTY—T 5n, R 11e, Sec. 15, J. J. Wright, Roberts 1, ne c sw, ¶2 915-18 ft, sd 1645 ft.

GARVIN COUNTY—T 2n, R 2w, Sec. 24, Malernee, Phillips 1, ne c sw, dr 3390 ft.

COAL COUNTY—T 2n, R 8e, Sec. 10, Whitney et al, Miller 1, se c ne (owd) sd 760 ft. T. 1n, R 8e, Sec. 35, W. E. McCraw, Stiring 1, ne c se, dr 1300 ft.

ATOKA COUNTY—T 3s, R 10e, Sec. 18, Brookshire et al, Guinn 1, ne c, show gas 360-72 ft sd 500 ft.

BRYAN COUNTY—T 7s, R 10e, Sec. 8, Bryan Oil Co., Childs 1, ne se sw, sd 660 ft.

NEW MEXICO

CHAVES—Warman Oil Trust, Siebert 1, ne 27-13-24, stand 2686 ft. Neal et al., Russell 1, nw 21-14-25e, stand 2320 ft.

DE BACA—Matador Oil Co.'s Wood 1, se 6-4n-20e, ur cas, td 3170 ft.

GUADALUPE COUNTY—N. M. Prod. & Ref. Co., McMullen 1, 24-5n-16e, dr 410 ft.

HARDING—Kumbaca O&G Co., Kerlin 1, se 34-21s-30e, temp sd, 1000 ft.

LUNA—Angelus Oil Mining Assn. 1, se 20-21s-10w, wtg cas 6085 ft.

McKINLEY—J. W. Halsell's 1, 17-18-9w, sd 3255 ft. Wms. et al's A. T. S. F. 1, se 19-18n-8, stand 1900 ft. United Kern Pete, Inc., sw 1-18n-11w, location. Dysart et al, Dysart

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2, ne 14-14n-10w, prep to set 8¼-inch at 1285 ft. Johnswood Oil Co., Hannett 1, sd 12-15n-10w, rigging.

MORA—Fulton Pete Co.'s Santa Fe Diox-Ice Co., Wagonmound 1, ne 14-19-21, dr 1310 ft.

OTERO—Ernest et al's 1, se 20-25s-7e, sd 1005 ft. Pasotero Oil Corp., Evans 1, sw 22-24s-12e, dr 110 ft.

RIO ARRIBA—Berrenger et al's Hartman 1, ne 8-29n-7w, sd 825 ft. San Juan Pete Co.'s Gov't 1, se 14-30n-7w, sd 250 ft. Governador Oil Co.'s 1, se 12-29n-7w, dr 1022 ft.

ROOSEVELT—Peterson et al., Good 1, ne 32-5s-30e, prep to spud.

SAN JUAN—Kutz Canon O&G Co.'s Day 1, se 20-28n-10w, fsh 3174 ft. Rio Grande Dev. Co.'s 2, 9-29-11, stand 1515 ft. Continental Oil Co.'s Rattlesnake 24, 1-29n-19w, prep to res., td 4730 ft. San Juan Leaseholds, Bowman 3, ne 30-30-15, sd 2685 ft. Reserve Oil Co., Reserve 3, se 36-22n-14w, ur to 748 ft. R. C. Oswell et al., nw 34-30n-11w, test gas at 415 ft. Wms. et al, Stallings 1, sw 17-25n-15w, dr 90 ft.

SAN MIGUEL—Pioneer O&G Co.'s Thunderbird 1, nw 14-15n-16e, prep to res 2340 ft. Starr Oil Co.'s Adams 1, ne 25-17-16e, wtg cable at 3700 ft. Cibola Pete Co.'s Crown 1, se 9-13n-14e, prep to res 750 ft. Hershfield Dev. Co.'s Cabra Springs 1, ne 12-12n-22e, prep to res 1415 ft. Con-O-Kul Oil's Cherryvale 1, ne 34-17n-21e, dr 730 ft.

SANTA FE—Jones, Owsley et al, Cantwell 1, 5-10n-9e, spd 65 ft.

TORRANCE—Wms. et al's Staplin 1, ne 16-8n-10e, ready to res 1643 ft.

COLORADO

ADAMS—N. M. Slatt's 1, se 27-26-64w, carry 6⅝-inch at 3672 ft.

ARAPAHOE—McDeb Drlg. Co.'s Fitzsimons 1, ne 7-4s-66w, wtg for cas 5836 ft.

BACA—A. R. Jones Oil & Optg. Co., Boice Cattle 1, 22-34-42w, cas trouble at 4965 ft.

EL PASO—Utemore Synd., Cannon 1, ne 10-16s-66w, sd 1125 ft.

GRAND—Oil Mineral Land, Inc., McElroy 1, sw 14-2n-81w, stand 545 ft.

HUERFANO—Parker Club, Inc., Fee 1, se 4-28s-68w, may start new hole, td of old 4116 ft.

JEFFERSON—Ruby Hill O&G Co.'s Braden 1, se 24-4s-59w, dr 3924 ft.

LAS ANIMAS—Oklahoma Drlg. Ass'n, Radcliffe 1, ne 28-26-52, sd 100 ft indefinitely.

LA PLATA—McGarr Pete Co.'s Pinon Mesa 1, ne 34-33n-12, location. Klem Pete Corp.'s Olbert 1, se 9-25n-12w, stand 3125 ft. Murchison Oil Co., Doescher 1, nw 29-33n-12, co 1225 ft.

LINCOLN — Eastern Colorado Oil Corp.'s State 1, 36-14n-57w, ur 4¾-inch to 3380 ft.

MONTEZUMA—G. H. Talcott et al's McElmo 1, 7-35n-16w, sd 635 ft. Haller et al, Carr 2, sw 33-36n-14w, abn 842 ft.

MONTROSE—Uncompahgre O&G Co., Title & Trust 2, 27-50n-10w, dr 985 ft.

MORGAN—Ind. Terr. Illum. Oil Co.'s State 1, ne 16-1n-57w, wait for rotary 4090 ft.

PUEBLO—Anchor Oil Co.'s Easley 1, sw 35-22s-57w, stand 532 ft.

PARK—So. Park Oil Co.'s Milligan 1, se 13-8s-76w, td 2017 ft, prep to cem. So. Park O&G Co.'s Easche 1, ne 5-9s-76w, dr 2365 ft.

RIO BLANCO—California Co.'s Raden 1, se 30-2n-102w, cem 30 ft. Magnolia Pete Co., Maddock 1, se 9-2s-96w, spd 50 ft.

WASHINGTON—Middlemist Oil Co.'s Middlemist 1, se 14-4-56, stand 1510 ft.

WELD—Reiter-Foster and Platte Valley Pete Corp., Johnson 1, 24-6n-61w, dr 4615 ft. Aztec Corp., Kirchoff 1, se 1-6n-61w, lcn.

WYOMING

CARBON—Midwest Refining Co., U. P. 1, 27-11-81, dr bel 2653 ft. P. & R., 19-20-83, dr 312 ft. P. & R., 7-25-86, run 6¼-inch at 2060 ft.

FREMONT—Texas Prod. Co.'s State 1, 36-33-95, sd for orders 4485 ft. P. & R. 1, 33-34-92, dr 5240 ft. Ward O&G Co.'s 28-34-90, dr bel 2100 ft. Wiebolt et al, 2-35-99, sd 1800 ft, wait for orders.

HOT SPRINGS—Grebo Roy., Inc., 3-47-100, set 12-inch at 836 ft.

LARAMIE—Prairie O&G Co., Warren 1, 22-13-68, dr 300 ft.

NATRONA—Summit Oil Co., 21-33n-80w, sd 1220 ft. Midwest's 11, nw 32-34n-77, stand

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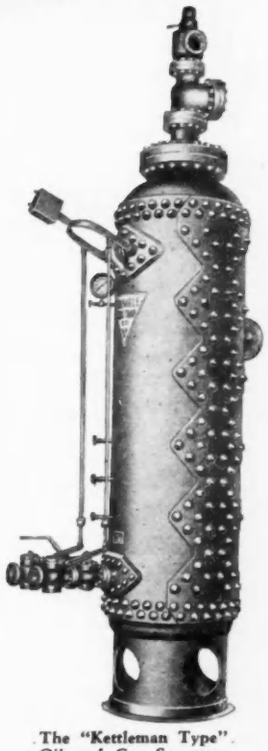

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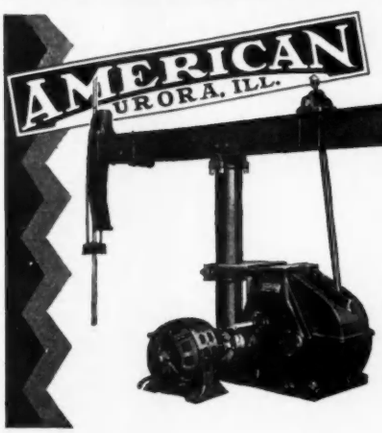

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5340 ft. Cuyler Oil Co., 23-36n-85w, dr 1700 ft. Golden West Oil Co., 36-36-81, co 1265 ft. Midwest's Midway 1, ne 23-35n-79w, co mud 5812 ft.

NIOBRARA—West Virginia Synd., 7-35-62, td 987 ft, cas trouble. Phillips Pete Co., sw se 32-34n-64w, oil show 375 ft.

PARK—Resolute Oil Co., 17-57-101, dr 8565 ft and flow by heads.

WASHAKIE—Ohio Oil Co., lot 14, 19-45-92, dr 5055 ft.

WESTON—LeFaivre Oil Synd., se 29-45n-68w, prep to cem 15½-inch at 1000 ft. Gose Oil Synd., 28-47-65, resum 4900 ft. Osage-Wyoming Oil Co., Witzell 1, se¼ nw 30-46-64, to resum at 1600 ft.

MONTANA

CASCADE—Andover Oil Co.'s Floweree 1, se 29-21-2w, prep to run cas, td 1405 ft.

CHOTEAU—Northern State Oil Co.'s Woodward 1, sw 20-14n-24e, dr bel 2400 ft. Melton Corp., 24-21n-17e, cas set 2825 ft, dr ahead. Pownam Oil Co., 24-19-11e, fsh 150 ft. Williston Shelby O&G Co., Flack 1, ne 12-28-11, wso 2830 ft.

GALLATIN—Gallatin Valley Oil Co., nw 1-1n-4e, dr bel 330 ft.

GLACIER—Fulton Pete Corp.'s Blackfeet 1, ne 28-36n-12w, dr 1850 ft cem caving hole. Jeffries-Hoerr's Dawson 1, ne 7-31-12w, resum 3000 ft. Montana Utilities Co., Hagland 1, sw 13-34-6w, stand 20 ft.

LIBERTY—Northland O&G Co.'s Yurman 1, 32-33n-5e, sd 3700 ft, wait for equipment. Peoples O&G Co., First Nat'l Bank 1, nw 17-36-6e, bldg rig.

ROSEBUD—Prairie O&G Co., 1-X, 26-10-39e, dr by tools 1944 ft, td 2415 ft.

TETON—Andover Oil Co.'s Carlson 1, 5-24-4w, stand 150 ft. California Co.'s Sullivan 1, nw 34-27-7w, dr 350 ft, hfw. Earl Oil Corp., Gad 1, se 22-22-8w, dr 2500 ft.

TOOLE—Liquid Gold Oil Co.'s Robert 1, ne 25-36-12, wait 5-inch at 2500 ft. International Roy. Hold. Co.'s Henry 1, 25-35-36, pull 8¼-inch 2650 ft. A-1 Pete Co., se 24-36-1e, abn 1580 ft. Campbell-Mont. Pete Corp., nw 29-36-2e, validation. Oregon Oil Synd., se 20-36-2e, rigging.

YELLOWSTONE — Peter Antonioli, 21-2n-25e, wait cas 1600 ft.

NORTHERN CALIFORNIA

Company, Well and Location	Initial Production Bbls.	Depth
VENTURA COUNTY—		
Southern California Drilling Co.'s Bishop 1, 12-4-29	*	3165
McKITTRICK—		
California Oil Producers' Wisecarver 1, 30-30-22	*	5545

KERN COUNTY

BELRIDGE—Belridge Oil Co.'s 27-64, 27-27-20, dr shale 4700 ft; No. 35-8, 35-27-20, 10¾-inch cas cmt 4915 ft, td 4923 ft; Nos. 35-33, 35-48 and 35-49, all on 35-27-20, are sd. Continental's Result 2, 36-27-20, coring shale 4900 ft. General Pet.'s Berry 1, 30-28-21, dr shale 4565 ft. Reward Oil Co.'s Associated 4, 34-27-20, circulating to complete, td 5510 ft. Standard's McPhail 2, 36-27-20, plugged to 5445 ft, sr to plug. K. C. Wallace's No. 1, 32-29-21, 6¼-in cas re-cmt 2590 ft, td 4212 ft.

BLACKWELL'S CORNER — Temblor Oil and Development Co.'s No. 1, 14-26-19, dr shale 400 ft. E. J. Miley's No. 1, 17-26-19, waiting on equipment.

BUTTONWILLOW — Wilshire Oil Co.'s Nordon-Salisbury 1, 7-29-24, co 6990 ft.

CARRIZO PLAINS — Panorama Oil Co.'s Panorama 1, 7-31-21, co 4010 ft, iron recovered. Tray El Oil Co.'s No. 1, dr shale 1950 ft.

DEVIL'S DEN—Standard's Alferitz 1, 14-25-18, 8⅝ inch cas cmt 2710 ft, td 3206 ft. Cumberland Oil Co.'s Cumberland 1, 21-26-19, sd 1590 ft.

EL TEJON—J. J. Ritchie's No. 1, 33-11-19, dr hard sand 5875 ft.

McKITTRICK — California Oil Producers' Wisecarver 2, 30-30-22, new lcn.

MOJAVE—Kendall Development Co.'s No. 1, 27-11-9, dr shale 200 ft.

SEMITROPIC—Shell's Wiliams 1, 17-27-23, perforating 9⅝-inch cas around 4500 ft, plugged to 4700 ft, td 9700 ft, testing at various levels.

WEED PATCH—Mohawk Oil Co.'s Earl 1, 4-31-29, rigged up to sp. Osborn and Colter's Shell-Duff 1, 15-30-29, dr shale 3700 ft. Shell's Morris 1, 9⅝-inch cas cmt 5675 ft, td 5785 ft; Porter-Day 1, 29-30-29, 4¾-inch cas re-cmt 7905 ft, td 8419 ft.

SANTA BARBARA COUNTY

COAL OIL POINT—Bolsa Chica Oil Corp.'s Augur 191-1, 24-4-29, sd 4191 ft.

GATO RIDGE—Barnsdall's Tognazzini 1, 9-8-32, co 6510 ft.

GOLETA—General Pet.'s More 3, swabbing water 5185 ft; Duncan 1A, 19-4-27, straightening hole, td 3050 ft.

GUADALUPE—Sovereign Oil Co.'s Donovan 1, 20-10-35, sdtr iron 5450 ft.

LOS ALAMOS—N. S. Wilson's No. 1, 2-7-33, dr shale 2414 ft.

LOS OLIVAS—Zaca Oil Co.'s Zaca 1, 20-7-5I, rigging up rotary.

NAPLES— J.H. Cochran's No. 1, 7-4-29, will deepen from 5135 ft.

ORELLA—General Pet.'s Erburu 10, repairing rig, td 2668 ft. Oakburn Oil Co.'s Sperry 169-1, new rig, td 2820 ft.

SANTA MARIA—Western Gulf's Bradley 1, dr shale 6670 ft.

VENTURA COUNTY

CONEJO—Mex. Cal. Oil and Ref. Co.'s Burlingham 1, 12-1-20, co 120 ft. Triunfo Oil Co.'s No. 1, 24-1-19, co 2390 ft.

HOPPER CANYON — Bardeen Pet. Co.'s No. 1B, 13-419, lcn.

RINCON — Chanslor-Canfield Midway Oil Co.'s Hobson A2, 23-3-24, running combination 4¾-inch and 3-inch liner for production test, td 10,030 ft. Continental's Grubb 1, 23-3-24, dr hard sand 4300 ft.

SANTA MONICA MOUNTAINS—Olympic Corp.'s Hearst 1, 18-1-17, dr hard lime 5775 ft.

SANTA PAULA—San Pedro-Pt. Fermin Oil Co.'s Kellerman 2, 13-4-21, new rig, td 3410 ft, will deepen.

SESPE—Merchants Pet. Co.'s Cochran 1, 1-4-20, placing on pump, td 1330 ft. Superior's Kirtlan 14, 14-4-21, dr shale 7000 ft.

TIMBER CANYON—Petro Well Producing Co.'s No. 4, 18-4-20, sd 1100 ft.

MISCELLANEOUS

FRESNO COUNTY—Associated's Jacalitos-Mitchell 1, 22-21-15, dr shale 4900 ft.

KINGS COUNTY—L. W. Seymour's No. 1, 10-23-16, fsh for iron 1010 ft. T. H. Purman's Avenal 1, 36-23-17, co 3540 ft. Irma Investment Co.'s No. 1, 7-23-20, co 1347 ft. Valley Exploration Co.'s Brennan 1, 20-23-20, will make preliminary test, td 3750 ft.

SAN LUIS OBISPO COUNTY—A. T. Jergin's No. 1, 6-32-13, rigging up rotary. C. J. Schilling's No. 1, dr hard sand 1200 ft. Cities Service Pet. Co.'s No. 1, 20-28-15, dr shale 350 ft. Paso Robles Synd.'s Emerick 1, 34-27-11, dr shale 4025 ft. Latin-American Pet. Co.'s Whitley 1, 31-27-15, 8¼-inch cas re-cmt 4255 ft, td 4618 ft, may make test.

SANTA CLARA COUNTY — Sargent Oil Co.'s No. 1, 1-12-3, rig.

TULARE COUNTY — Big Four Drilling Co.'s No. 1, 29-23-27, co 4330 ft. Turk and Compbell's Nevins 1, 34-22-27, dr 1400 ft.

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SOUTHERN CALIFORNIA

BELL—Cudahay Community Oil Assn.'s No. 1, 30-2-12, bailing water, td 1330 ft.

CULVER CITY—Olympic Realty Co.'s No. 1, 14-2-15, trying to pull drill pipe, td 6078 ft. Taylor Oil Co.'s No. 1, 12-2-15, sd 6080 ft.

FULLERTON — Standard's Bastanchury 1, 21-3-10, co 8144 ft.

HERMOSA BEACH — Calico Royalty Series' No. 1, sd 2525 ft. E. S. Cone's Kellogg-Burdick 2, 6-4-12, lcn; Kellogg-Burdick 3, 6-4-14, lcn. Hermosa Exploration Co.'s No. 1, pumping oil, td 3020 ft. Tulsa Oil Co.'s Hermosa 2, 6-4-14, dr out cmt, td 3140 ft. Westwood Pet. Co.'s No. 1, 6-4-14, co 3170 ft.

LOMITA—Heller-Davis Oil Co.'s Hamlin 1, co 4780 ft.

MANHATTAN BEACH — Staple Oil Co.'s No. 1, 24-3-15, dr shale 1828 ft.

NEWHALL—Electrical Pet. Corp.'s Overman 1, 6-3-16, sp. Guarantee Oil Co.'s Hammond 1, dr shale 3026 ft. O. C. O. Oil Co.'s No. 1, 14-3-16, dr shale 665 ft. Rayne Oil Co.'s No. 1, 11-3-16, rig.

NEWPORT—Nuoil Co.'s No. 1, 29-6-10, co 1370 ft. Standard's Irvine 1, 26-6-10, dr black shale 4828 ft.

OCEAN PARK—Hines Pet. Corp.'s Happy Days 1, 8-2-15, dr shale 6470 ft.

OLINDA—Graham-Loftus Oil Co.'s No. 1, 18-3-9, dr hard sand 7730 ft.

PLAYA DEL REY — Mesmer City Realty Co.'s No. 1, 24-2-15, dr shale 6066 ft. West Port Oil Co.'s No. 1, 27-2-15, fsh for drill pipe 5965 ft.

PUENTE—Guarantee Oil Co.'s Rowland 1, 14-2-10, dr shale 4780 ft. Rucker and Croul's Grazide 2, 22-2-10, sd 2180 ft.

ROSEMEAD—Rancho Oil Co.'s Harmon 1, 30-1-11, plugged to 5560 ft, td 5975 ft.

REPETTO HILLS—Texas' F. M. 1, 4-2-12, dr rock 3820 ft.

SAN FERNANDO — El Caballero Estates Co.'s No. 1, 23-1-16, dr sand 400 ft.

SUNSET BEACH—Gieck Oil Corp.'s No. 1, 20-5-11, dr shale 4500 ft. McAleer Gun Club's No. 1, 21-5-11, lcn. George E. Miller's No. 1, 20-5-11, lcn.

WILMINGTON—Lucky Four Synd.'s No. 1, lcn; No. 2, lcn. Pacific Coast Pet. Corp.'s Watson 1, 29-4-13, dr shale 4175 ft. George Tighe's No. 1, lcn.

YORBA LINDA—International Pet. Corp.'s No. 1, 21-3-19, lcn; Todd 1, 21-3-9, pumping oil and water, td 1875 ft.

RIVERSIDE COUNTY—Phoenix Petroleum Co.'s No. 1, 20-3-5, lcn.

Letters to the Editor

▼ ▼

Sir:

Do you suppose there would be a chance to convey a simple message to the oil world through your publication? We have talked and fought proration, unitization, conservation, and have cut prices to less than the lifting cost. Now they are talking of stopping production of old fields. All of this and there is really only one solution and it is so simple—*stop drilling.*

If the oil man will *stop drilling* there will be no need of government interference, state direction, nor recommendations from self-appointed "Advisory Committees."

If the oil industry were all under federal or a single control the first thing they would do would be to *stop drilling.*

So in the words of General Smedley Butler, "Why in Hell can't the oil man see this and *stop drilling.*"

J. Murray Henry,
Oklahoma City, Oklahoma.

4000 FEET
GUARANTEED PERFORMANCE

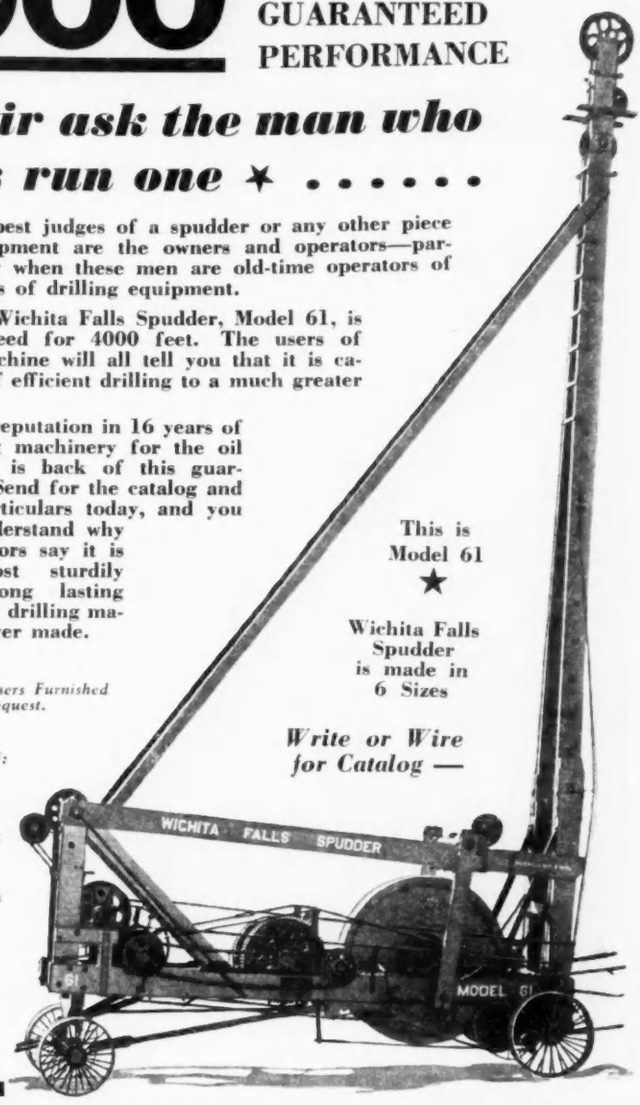
Yes Sir ask the man who has run one ★ .....

The best judges of a spudder or any other piece of equipment are the owners and operators—particularly when these men are old-time operators of all types of drilling equipment.

The Wichita Falls Spudder, Model 61, is guaranteed for 4000 feet. The users of this machine will all tell you that it is capable of efficient drilling to a much greater depth.

Our reputation in 16 years of building machinery for the oil country is back of this guarantee. Send for the catalog and full particulars today, and you will understand why contractors say it is the most sturdily built, long lasting portable drilling machine ever made.

★*Name of Users Furnished on request.*



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Wichita Falls Spudder is made in 6 Sizes

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4000 FEET

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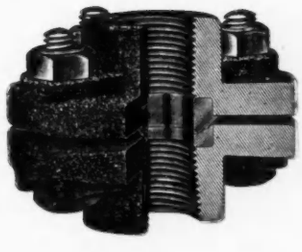

REMOVE the seizing from ordinary wire rope, and the strands straighten out as the bound-up stress is released. It is this internal stress in ordinary wire rope which causes early fatigue and premature failure. Bending stresses *plus internal stress* shorten wire rope life.

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New Equipment for the Field

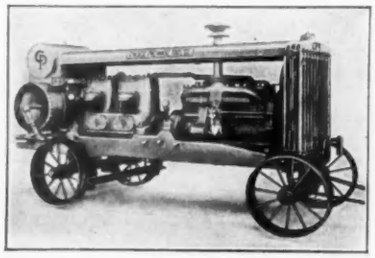
MACHINERY-TOOLS CATALOGS-BOOKS

▼ ▼ ▼

Portable Compressor

CHICAGO PNEUMATIC TOOL COMPANY

Chicago Pneumatic Tool Company, New York, announces as the latest addition to its CP line of portable compressors, the 360 Cubic Foot Portable Compressor, mounted on steel wheels, a four-cylinder-in-line compressor which has been combined with a heavy duty Hercules motor.



Chicago Pneumatic Compressor

Employment of an accurately counterbalanced crank-shaft, with quartered cranks, and the use of a six-cylinder engine have developed the following features in this new machine: vibration reduced to a minimum, full force feed lubrication of compressor and engine, direct drive through flexible coupling, counter-weights forged integral with compressor crank-shaft, and one-piece cast steel deck.

Other features include: full-floating piston pins in compressor, large compressor crank-case doors, affording easy accessibility to the bearings, sectionalized radiator with steel protection bars and fan guard, and cylinders cast separately from the crank-case.

Further information may be secured by writing for bulletin Number 755, to the Chicago Pneumatic Tool Company, New York.

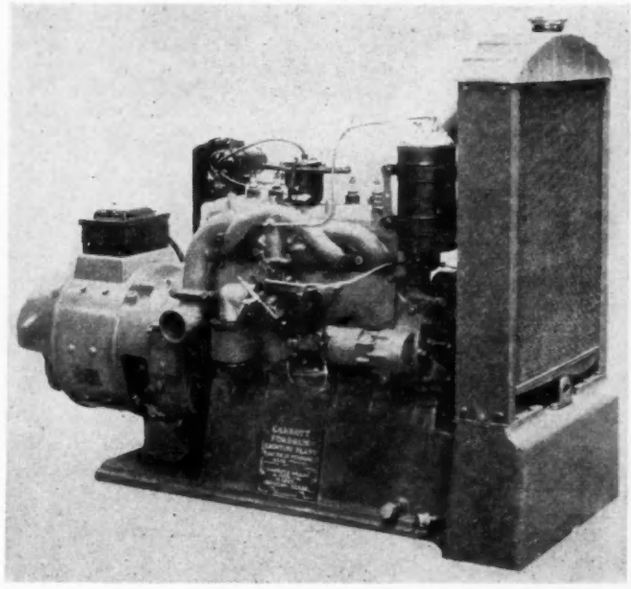
Electric Plant

GARROTT BRASS & MACHINE COMPANY

Garrott Brass & Machine Company, Houston, announces its Fordrun gas engine-driven electric plant, built in 3½, 5, 7½, 10, and 12 KW, both in direct and alternating current. These plants are powered by a Ford Model A motor. A special portable model is built for oil field service.

One of the principal features of this plant is the provision of a special crank case which is cast integral with the base making a substantial foundation. The crank case holds six gallons of oil beneath the engine and five gallons of water beneath the radiator. The cooling water circulates through this chamber and by means of a heat exchanger, keeps the crank case oil at a uniform temperature. The liberal quantity of oil assures perfect lubrication of the interior parts of the engine and makes it unecessary to change oil frequently.

A second feature in the operation of this plant is the addition of a Pierce governor which automatically cuts down the speed of the motor with the cutting down of the load on the generator.



Fordrun Electric Plant

On the 3½ KW unit the generator is bolted directly to the flywheel housing through the medium of a specially cast adapter. On the larger plants the generator is supported by a sub-base which extends the length of the unit.

Motor can be run on gasoline or natural gas and is furnished in manual starting, self starting or automatic types.

Literature illustrating these plants may be secured by writing the manufacturers, Garrott Brass & Machine Company, Houston, Texas.

Motor

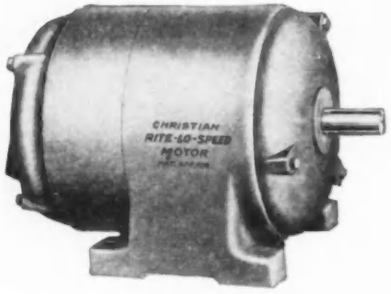
J. D. CHRISTIAN-ENGINEERS

J. D. Christian-Engineers, San Francisco, announce a late development in power transmission known as the Rite-Lo-Speed motor. This motor embodies a standard footless stator and rotor and heat treated alloy steel helical gears. These are ball bearing mounted and arranged in a compact manner.

The gear end of the assembly presents a unique design which is not in any way a planetary system, there being only two gears and two pinions. It is so arranged that a heavy overhung pull can be taken on the final shaft without the use of an outboard bearing, according to the engineers. The entire assembly is protected by a dirt-proof and water-proof housing.

This motor is manufactured in four series. Series A is standard, comprised of the motor and housing with a single power take-off. Series B is a single motor unit with a gear housing at each end having two power take-offs at the same speed. Series C is the same as Series B with the exception that it has two power take-offs at different speeds. Series D is a single motor unit with gear housing at one end with power take-off at reduced speed, and with a high speed motor

▼ NEW EQUIPMENT FOR THE FIELD ▼



Christian Motor

shaft extended through the rear end bell. The motor is made in sizes from one to 30 horsepower and a junior model is made in sizes from one-fourth to one horsepower.

A bulletin giving detailed description of the motors may be secured by writing to the factory of J. D. Christian-Engineers, 512 Brannan Street, San Francisco, California.

Pipe Bending Shield

AMERICAN STEEL WORKS

American Steel Works, 27th and Southwest Boulevard, Kansas City, Missouri, is manufacturing the American pipe bending shield of one piece steel, with no welded seams. The shield is made from heavy sheet plate, and can be clamped on the side of the pipe with load binders.

The shields, in 24 and 26-inch size, are nine feet long and so constructed as to form an extra large heating chamber alongside of the pipe. Sled runners are welded to the shield so that it can be dragged along the line, saving loading into a wagon or truck each time a bend is made.

Large, double jetted torches firing from each end of the shield completely circulates the heat around the pipe to heat the pipe evenly the full length of the shield. Ten to 15 minutes is required for sufficient heat to make the bend.

A 75-gallon oil supply compressor unit is mounted on regular spring mounting steel chassis with six-inch face roller-bearing wheels. The chassis is so constructed with standards that 10 or 12 skids can be carried along the line. The compressor unit is equipped with gear driven air compressor, one horsepower gasoline engine. The tank has an emergency hand operated air pump in the rear. A tray on top provides safe carrying plate for the torch and hose.

The tank unit is a combination unit, used for either torches, or spray outfits for spraying the pipe.

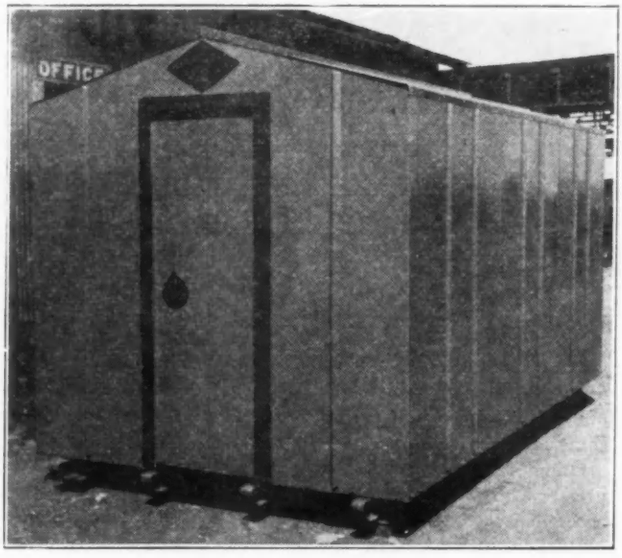
American Steel Works will furnish more complete details upon request to the above address.

Sheet Iron Tool House

LION TOOL & SUPPLY COMPANY

Lion Tool and Supply Company, 320 West Tyler Street, Longview, Texas, has recently designed a tool house unique in construction. The most important feature is that it is knockdown in construction and may be shipped to any point crated.

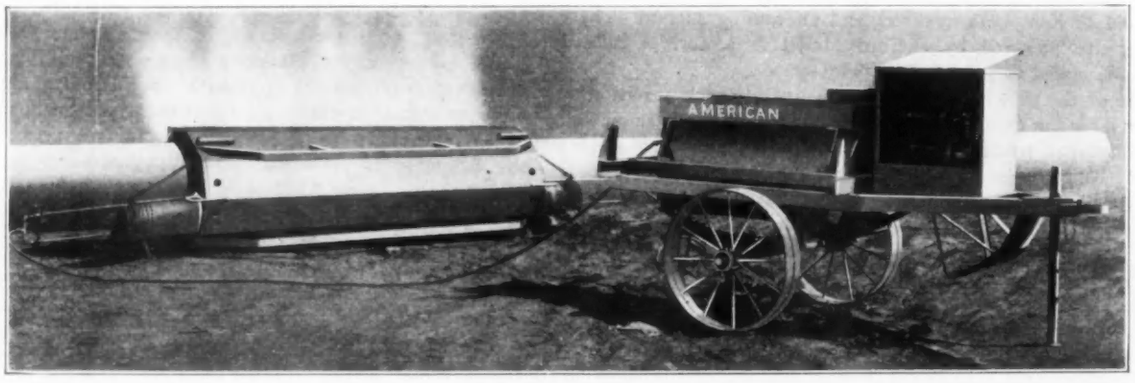
This sheet metal tool house is made in seven pieces consisting of the two sides, two ends, two pieces to the top and one for the bottom. All of the house is made from No. 14 gauge blue annealed sheet-iron except the bottom which is No. 12 gauge and the same having four four-inch I-beams welded and riveted on for skids. The complete house has approximately 200 three-eighths by three-quarter-inch bolts and two men can erect it in less than one hour.



Sheet Iron Tool House

The entire construction is so designed that angles have been eliminated, the sheets being flanged and corrugations used for strength. The house has two doors which are sliding type.

Dimensions of the house are six feet and nine inches wide, 11 feet and nine inches long, and seven feet high, giving the house approximately 84 square feet of floor space. On the inside is a driller's desk and a portable steel work bench.



American Pipe Bending Shield

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5 Tons
Straight Line

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16"x17"x13"
High

PRICE
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Steel Tail Hold Yoke $4 extra. Truck Attachment Plate $10 extra.

"THE STRONGEST GEARED POWER FOR ITS WEIGHT IN THE WORLD."

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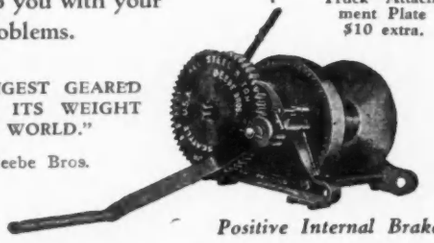

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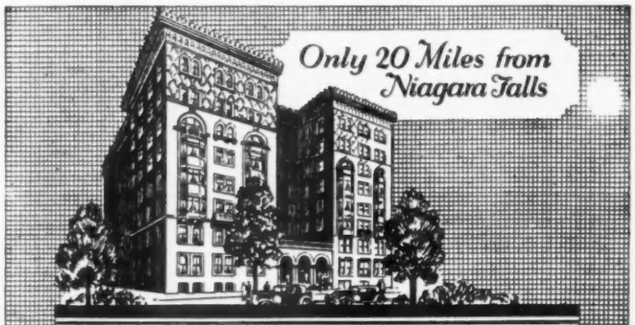

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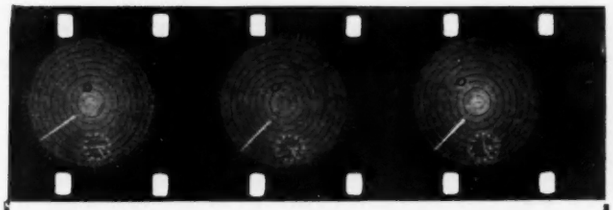

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The SURWEL Clinograph is saving time, money and trouble in oil fields everywhere.

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415 Petroleum Securities Building

CALGARY, ALBERTA, CAN.,
Room 1, Central Block

SURWEL Clinograph

Manufacturer and Supply Dealer Notes

▼ ▼ ▼

Allbestos Corporation, Philadelphia, has developed and is now marketing on the Pacific Coast a new brake lining. It is of 12-ply construction, 55 picks to the inch, each ply tying itself in with the next ply, thus eliminating the use of binders. The long fiber asbestos yarn is of three-ply construction, twisted and spun with four-ply wire to make a single strand. These strands are then woven into the finished product. Complete stocks of the lining are carried at Los Angeles at the company's warehouse and district headquarters, 216 North Alameda Street.

Continental Steel Corporation, Kokomo, Indiana, announces an improved Chain-Link fence in a folder issued recently. Improved features of the fence together with an explanation of the process used to prevent cracking of the zinc coating and resistance to corrosion are discussed in this leaflet. Further information regarding the Continental Chain-Link fence may be obtained by writing to the Continental Steel Corporation, Kokomo, Indiana.

Metalastic, Incorporated, Union City, New Jersey, has issued an eight-page booklet describing the new Metalastic packing in coil form. This booklet contains a number of exceptionally interesting pointers on packings. The fundamental base of the new Metalastic is a metal which resists corrosion from acids, alkalies, and electrolysis. This metal withstands temperatures in excess of 1200°F. It also possesses the property of expansion upon cooling. This metal is present in the form of a powder which thoroughly coats the fibrous asbestos particles with an unbroken metallic covering. These metal covered fibres are thoroughly lubricated and bonded together under pressure, forming a homogeneous packing. The packing compound is then formed into continuous lengths of whatever sizes are required. Copies of this booklet may be secured by writing to the company's offices in Union City, N. J.

Pacific Pipe and Supply Company, Los Angeles, has recently published a leaflet covering the application of Papico Natural Gas Odorization Equipment. It is said that this type of equipment is used quite extensively to odorize the bulk of natural gas consumed in Southern California and many other districts. The principle upon which this mechanism operates, utilizes differential pressures obtained across an orifice disc. The pressures thus obtained operate automatically to control the amount of odorant diffused into the gas transmission line. Several views of actual installations appear in this leaflet along with an interesting graph showing results obtained under various odorant concentrations. Copies may be obtained by writing to Pacific Pipe and Supply Company, 1002 Santa Fe Avenue, Los Angeles, California.

Littleford Brothers, 443 East Pearl Street, Cincinnati, Ohio, is mailing to pipe line companies Bulletin G-7, devoted to covering its line of hot dope kettles for pipe line work. A copy of this bulletin, or of the May 1931, issue of The Elbee Tatler, a house organ of the company which shows the dope kettle in varied use, may be secured for the asking.

Group Engineering Company, was recently organized at Montreal, Canada, with offices to be maintained at Montreal, Halifax, Winnipeg and Vancouver. Officers of the company include: D. L. Alexander of the Alexander Diamond Drilling Company, Montreal, president; F. D. Sullivan of The Sullivan Company, Memphis, Tennessee, vice president, and T. E. Ward, president of the Oilfield Equipment Company and The Sullivan Company of New York. This company will handle Fissueseal, a product invented and developed by F. D. Sullivan. This product has been used successfully in foundation, dam and tunnel grouting and for walling up heaving and caving shale and other loose formations in oil wells. An American company has also been organized known as Grout Engineering Company, Inc., a Delaware corporation, with offices at Memphis, New York, Dallas, New Orleans, Los Angeles, Tulsa El Paso, Seattle, Minneapolis and Chicago for the handling of the same work in the United States and foreign countries and also to use any of the technical products manufactured by The Sullivan Company, including Konset. Officers of this company are: T. E. Ward, president; F. D. Sullivan, vice president, and Ralph Ley, secretary and treasurer.

Goulds Pumps, Inc., Seneca Falls, New York, announces opening of an office at Dallas, Texas. This office is located at 1309 Magnolia Building, and Fred H. Hayes is the manager in charge.

Shaffer Tool Works, Brea, California, has recently issued bulletins on its newest fishing tools. Fluid Trip Rotary Jar booklets and Inside Casing Cutter folders are now ready for distribution and may be secured upon request to the company.

Modern Diesel Engine Practice

By ORVILLE ADAMS

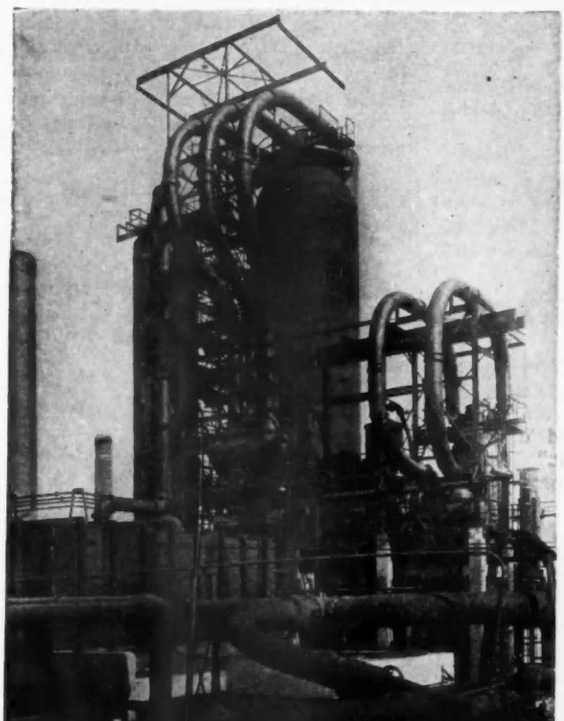
"Modern Diesel Engine Practice" has been prepared as a comprehensive treatise for the student and practical engineer, covering fully all types of Diesel engines with all available information regarding operating principles, applications, installations and costs. This book is based on the experience of the leading Diesel engine manufacturers, engineers and experts on servicing and operation, and includes instructions suitable for the owner, operator, repairman and engine salesman and is also valuable to the student.

The information is presented in non-technical language, and is suitable for class-room use or home study. The presentation indicates a recognition of sound methods of engineering apprentice training. The author's knowledge of Diesel engine practice makes his discussions all the more valuable, since he combines the theoretical with the practical side of the subject so successfully that no detail of importance is omitted.

Suitable illustrations of high speed engines of recent design are shown. There are altogether over 400 engravings and illustrations contained in the book. A special section is devoted to the Packard-Diesel aircraft engine and the Ingersoll-Rand locomotive oil engine with detailed description and illustrations given.

GULF

Modern Methods Make Modern Gulf Products



the largest Atmospheric-Vacuum Still ever built.

Paraffine and Coastal Crudes

Gasoline · Lubricating Oils

Naphtha · Gas · Oils

Wax · Petroleum Coke

Cylinder · Engine · Cordage

GULF REFINING COMPANY

General Sales Offices: PITTSBURGH, PA.

WHEN YOUR DRILLER GETS SORE AND SLAMS THE BRAKES DOWN . . . PROMISE HIM AN

APPLEMAN!

Driller: (As he slams the brakes down with a vengeance) "I can make as much hole as any digger with the right equipment."

Superintendent: "What are you griping about . . you've got a new rig and everything."

Driller: "All new things ain't good. These mud paddles we're usin' are no match for the APPLEMANS they're diggin' with all around us."

Superintendent: "You're right, Bill! I was just kidding you . . . you blew up just as I was going to tell you that we'd ordered APPLEMANS to be delivered tomorrow. You'll cut your round trips in half now!"

Use* APPLEMAN GUMBO BITS** ***from now on and save time and money.

B. K. APPLEMAN
BEAUMONT, TEXAS

Squeaks From the Bull Wheel

▼ ▼ ▼

Tired Wife (to fussy husband)—Really, John, I'd rather have all the children sick than you.

John—So would I.

Census Taker—What does your husband do for a living?

Housewife—He sells apples.

Census Taker—I thought you said he was an evangelist.

Housewife—Oh, that's his profession.

"We are celebrating our maid's jubilee today."

"Has she been with you 25 years?"

"No, she is the twenty-fifth we have had this year."

"Will you give me something for the suffering poor?" the woman asked the business man.

He strove desperately for some excuse.

"Er—are you quite sure they are suffering?" he asked.

"Quite positive," she replied. "I ought to know, for I go into their houses and talk to them for hours at a time."

First Kid—"My dad is a Lion, a Moose, an Eagle, and an Elk."

Second Kid—"What's it cost to see him?"—*Taken from Empire News.*

"How's business?" a traveling salesman asked the new barber.

"Boy," replied the barber, "it's so quiet here you can hear the notes drawing interest a block away at the First National Bank."

A corporal was marching in front of his squad when he overheard a voice in the rear rank say: "This squad is like a flivver. The crank is in front."

"Yes," snapped back the corporal, "but the nuts are all behind."

Two old maids were in an insane asylum for years, always knitting and knitting.

"Gee," sighed Mayme one day, "I wish some tall, handsome man would wind his arms around me and squeeze me until I gasp."

"Now you're talking sense," from Jayne. "You'll be out of here in a few days."

Betty—How did mama find out you didn't really take a bath?

Billy—I forogt to wet the soap.

"Hello! Rolling your own cigarettes?"

"M'm, doctor says I must get more exercise."

Customer: "I want some powder to kill cockroaches."

Clerk: "Will you take it with you?"

Customer: "No, I'll have the cockroaches call and you can rub it on their little tummies."

A gay young man, traveling in a Pullman car, forced his sentiments upon the passengers by attempting to ridicule the Scripture; and among other topics, made himself merry with the story of David and Goliath, strongly urging the impossibility of a youth like David being able to throw a stone with sufficient force to sink it into the giant's forehead. On this he appealed to some of the passengers, and particularly to a grave old gentleman of the Quaker denomination, who sat silently in a corner of the car.

"Indeed, friend," he replied, "I do not think it at all improbable, if the Philistine's head was as soft as thine."

These two classified ads from a Huntsville (Ala.) newspaper tell their own story without further explanation or comment:

"Notice: From this date, I will not be responsible for any debts or obligations made by my wife.—G. A. F."

"Notice: I have not purchased anything for cash or credit since I became Mrs. G. A. F.—Mrs. G. A. F."

Mrs. A—My husband has no idea what I go through when he snores.

Mrs. B—Mine never misses his small change, either.

Servant (announcing new arrivals at the party)—"Mr. Tootle."

Mr. Tootle (in undertone)—"And Mrs. Tootle."

Servant—"And Mrs. Tootle too."

"Seven towns, I believe, claimed Homer."

"Some of our citizens are wanted by more than that."

"Do you think you could learn to love me?"

"Well, I learned to eat spinach."

Devoted Admirer: "There are certain advantages in being a bachelor, but there are times when one longs for a being who regards one as perfect, and whom one can call absolutely one's own."

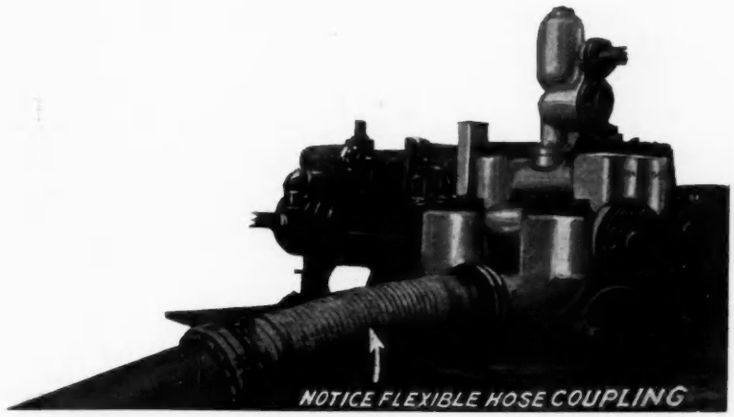
Girl—"If I were in your place, I'd get a dog."

"I'm sorry," said the sweet young thing blushing as she stumbled and fell while getting into the car, "these new skirts are so tight around the bottom."

"I noticed that and they fit pretty tight around the ankles, too."

"Jedge, yo Honah," complained the irate colored lady to the court, "dis yeah no 'count husban' o' mine drinks."

"Yessuh, Jedge, yo' Honah, Ah does drink some," admitted the husband. "But Jedge, dat woman don' treat me right. Why, Ah pawns the kitchen stove t' git a li'l money an' she don' miss it fo' two weeks!"



Direct flow SLUSH PIT to PUMP

Only WILSON-SNYDERS *have this feature!*

- **Side Suction—straight line flow—no crooks —no turns—no ells to hamper the passage of mud from pit to pump. This feature, exclusively Wilson-Snyder, gives you a greater freedom from pump difficulties—more economical operation and the satisfaction that can be derived only from perfectly performing equipment.**

- **The pump is easier to mount. A flexible hose coupling, that absorbs vibration, eliminates all the usual swivel ells, unions and pipe connections. It reduces wear and tear—lengthens life—and facilitates handling of suction pipe to pit.**

- **Other results of this advanced feature are quicker filling of pump and more even distribution of fluid to valves.**

- **You get the finest and most efficient pumping service when you buy a Wilson-Snyder Slush Pump with the new Side Suction. Fluid End that is tested to 3000 pounds.**

Another Store In East Texas

The opening of our new store at Gladewater, gives East Texas operators three points from which to get Wilson Supply Co. service. The other two stores are at Kilgore and Joinerville.

WILSON SUPPLY COMPANY

1412 Maury St.
Houston, Texas

OIL and GAS WELL SUPPLIES

BRANCHES
Luling, Beaumont, Pettus, Barbers Hill, Kilgore, Joinerville, Gladewater, Texas, and Shreveport, La.

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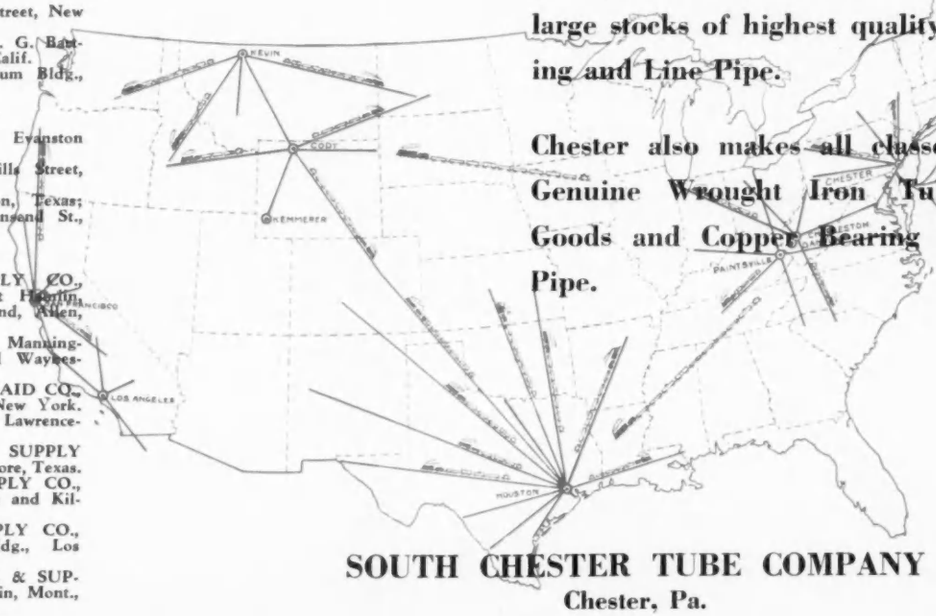
From our distributing centers throughout the oil fields, we can give you prompt service from our large stocks of highest quality Casing and Line Pipe.

Chester also makes all classes of Genuine Wrought Iron Tubular Goods and Copper Bearing Steel Pipe.



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J. P. STEELE, 305 Petroleum Bldg., Fort Worth, Texas.

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LeVALLEY, McLEOD, KINKAID CO., INC., Elmira and Olean, New York.
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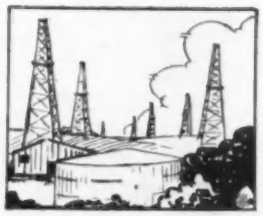
SOUTH CHESTER TUBE COMPANY
Chester, Pa.

CHESTER

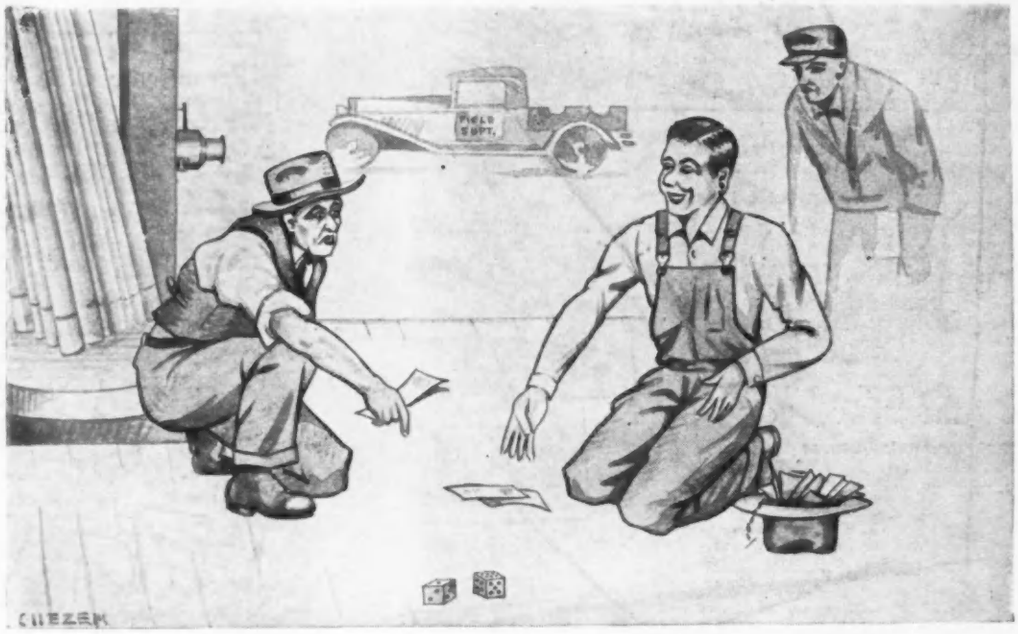
STEEL CASING

SPECIALISTS IN CASING FOR DEEP WELL DRILLING

LINE PIPE



FOR PERFECT PERFORMANCE

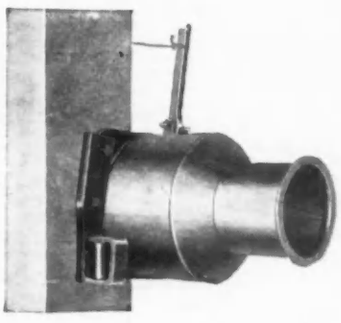


Animated forms kneeling in a huddle; one, for the moment, is master of the ritual. With a delighted grin, a swift underhand gesture, and a snap of the fingers, he throws the cubes spinningly into the air, they plop gently into the dust—a six and a one.

It's fun to watch, as a piece of entertainment, but the wise know that results are purely luck.

You don't have to get down on your knees and plead for good luck when you use the American Automatic Cathead.

AMERICAN AUTOMATIC CAT HEAD



All movable parts housed and mounted on Cathead spool with keys on the line shaft.

Clutches have four point contact and two point disengagement, and also have twelve square inches of clutching face when engaged. Cathead has 36-inch stroke and can be engaged on quarter revolution. Thoroughly greased from one point by Alemite. Pays for itself in time saved coming out of the hole as well as a safety factor in preventing accidents.

American Products Sold Thru Leading Supply Stores

AMERICAN
IRON & MACHINE WORKS CO.
OKLAHOMA CITY, U. S. A.

MANUFACTURERS OF OIL FIELD EQUIPMENT